## SOUTH PENINSULA ANNUAL SALMON MANAGEMENT REPORT, 1993

By

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## INTRODUCTION

The South Alaska Peninsula (South Peninsula) is a portion of the Alaska Peninsula Management Area (Figures 1 and 2). The South Peninsula consists of Pacific Ocean coastal waters extending west of Kupreanof Point to Scotch Cap on Unimak Island. The South Peninsula is divided into four subareas: (1) the Southeastern District, consisting of waters between Kupreanof Point and McGinty Point; (2) South Central District, consisting of waters between McGinty Point and Arch Point Light; (3) Southwestern District, consisting of waters between Arch Point Light, False Pass, and Cape Pankof; and (4) Unimak District, consisting of waters between Cape Pankof and Scotch Cap (Figures 3-7). The Southeastern District is further subdivided into two areas: (1) the Shumagin Islands Section, consisting of the Shumagin archipelago; and (2) the Southeastern District Mainland, consisting of the waters of Stepovak, Balboa, and Beaver Bays (Figures 3 and 8).

Five species of Pacific salmon are harvested in the Alaska Peninsula Management Area: chinook salmon *Oncorhynchus tshawytscha*, sockeye salmon *O. nerka*, chum salmon *O. keta*, pink salmon *O. gorbuscha*, and coho salmon *O. kisutch*.

In 1993, as an aid in producing the annual salmon report, the Alaska Peninsula, Aleutian Islands, and Atka-Amlia Management Areas were divided into four regions of reporting responsibility. A report titled Annual Summary of the Commercial Salmon Fishery and a Report on Salmon Subsistence and Personnel Use Fisheries for the Alaska Peninsula and Aleutian Islands Management Areas, 1993 (McCullough et al. 1994) will serve as the Alaska Peninsula, Aleutian Islands, and Atka-Amlia Management Areas salmon subsistence and personnel use salmon reports and an introduction for this report. Appendices of this report will contain a listing of South Peninsula emergency orders (Appendix A), methodology for determining indexed escapements (Appendix B), and a personnel list (Appendix C). A separate report (Nelson *In press*) will provide estimated catch and escapement age, sex, and length data. Separate indepth annual salmon management reports will describe the Aleutian Islands Management Area (Shaul and Berceli 1994), Atka-Amlia Management Area (Holmes *In press*), and the North Alaska Peninsula (Murphy et al. 1994) salmon fisheries.

There are two Alaska Department of Fish and Game (ADF&G) offices in the South Peninsula: Sand Point and Cold Bay (Figure 3). In 1990, Sand Point staff assumed responsibility for managing salmon in the Southeastern District. The balance of the South Peninsula salmon fisheries are managed with staff from Cold Bay.

Only Commercial Fisheries Entry Commission (CFEC) Area M purse seine, drift gillnet, and set gillnet permit holders are allowed to commercially salmon fish in South Peninsula waters (ADF&G 1992; Figure 9). There are a total of 125 purse seine, 164 drift gillnet, and 114 set gillnet permanent and interim use permits available to commercially salmon fish (Table 1). Nearly all permits are used (make at least one delivery each year). The 1988-92 average number of permits by gear type in use was for purse seine 120, drift gillnet 161, and for set gillnet 102. Most purse seine and set gillnet permits holders fish South Peninsula waters throughout the season, while most drift gillnet permit holders fish South Unimak waters during June and North Peninsula waters during July through September (Table 2).

Salmon fisheries in the South Peninsula date back to at least 1888 when canneries were reportedly constructed at Orzinski (Orzenoi) Bay and Thin Point Cove. However, the earliest catch records for the South Peninsula date back to 1908 (Tables 3 and 4). Early catches in the South Peninsula were dominantly sockeye salmon with a few chinook and coho salmon. The first year in which reported pink and chum salmon catches exceeded 500,000 each was 1916.

A large portion of South Peninsula fisher's earnings comes from harvesting migrant salmon. The South Peninsula interception fisheries include the South Unimak (False Pass) and Shumagin Islands June fisheries (ADF&G 1992; 5 AAC 09.365 South Unimak and Shumagin Islands June salmon management plan). The Southeastern District Mainland (Balboa-Stepovak or Stepovak) fishery intercepts sockeye salmon bound for the Chignik Management Area (ADF&G 1992; 5 AAC 09.360 Southeastern District Salmon management plan). The Post June salmon management plan for the Southern Alaska Peninsula (ADF&G 1992; 5 AAC 09.366 Post June salmon management plan for the Southern Alaska Peninsula) addresses the interception of salmon from early through mid-July in South Peninsula cape fisheries.

A list of statistical numbers that apply to the 1970-93 fisheries are in Table 5.

The 1973-92 average salmon harvest in the South Peninsula was 7,578,438 salmon comprised of 6,751 chinook, 1,615,420 sockeye, 200,025 coho, 4,646,470 pink, and 1,109,773 chum salmon (Table 3). The 1983-92 average was higher for each species; the average harvest was 10,170,833 salmon comprised of 10,784 chinook, 2,197,899 sockeye, 306,405 coho, 6,167,842 pink, and 1,487,903 chum salmon.

The most numerous species produced in South Peninsula streams is pink salmon (Tables 6 and 7; Murphy 1992; Shaul et al. 1993). Runs fluctuate dramatically from year to year due to the magnitude of parent escapements and environmental conditions. During 1973-92, commercial

catches averaged 4,646,470 and ranged from 58,051 pink salmon in 1973 to 11,589,258 in 1984 (Table 3). Most systems can produce large runs on both even and odd year cycles, however, most of the streams between Cold Bay and Unimak Bight are basically even year producers. Dry Lagoon and Apollo Creeks on Unga Island also produce more pink salmon during even years (Figure 10). Pink runs usually arrive in substantial quantities by about July 20 and peak about August 1. After August 15-20 the fish quality is usually poor due to water marking.

Chum salmon are the second most numerous locally produced species in South Peninsula waters (Tables 6 and 7; Figure 11). During 1973-92, commercial catches averaged 1,109,773 and ranged from 71,826 in 1974 to 2,272,495 in 1982 (Table 3). Chum runs are somewhat more stable than pink salmon runs due to the presence of more than one age class and the tendency for chum salmon to select spawning locations that are less susceptible to scouring and freezing. Chum runs start earlier and last longer than those of pink salmon. There is also a large variation in run timing between different chum stocks.

Sockeye salmon are usually the most important species economically. Most sockeye catches during June occur on stocks bound for Bristol Bay while most of the sockeye salmon caught in the Southeastern District Mainland fishery are bound for Chignik (ADF&G 1992; Appendix A). The South Peninsula has numerous sockeye salmon stocks which contribute to varying degrees to all South Peninsula fisheries (Tables 6 and 7). Most local stocks are small although Thin Point and Middle Lagoon (Morzhovoi Bay) are believed to have produced substantial runs during the 1920's and 1930's. These systems appear to be returning to high production levels through good escapement monitoring and an aggressive enforcement program. Thin Point and Morzhovoi Lakes are suspected of having rearing capacities greatly in excess of spawning capacities. The potential of producing substantially larger runs through supplemental methods exists. Orzinski Lake is an important contributing system to Southeastern District catches. During 1973-92, South Peninsula commercial sockeye catches averaged 1,615,420 and ranged from 197,153 in 1974 to 3,613,025 in 1980 (Table 4).

Few coho salmon are harvested during June, most are caught incidentally from mid-July through mid-August while fisheries are targeting pink and chum salmon. Historically, South Peninsula coho catches have demonstrated long periods of varying abundance (Figure 13). From 1923 through 1946, catches were at a high level, averaging 148,000 salmon annually (Table 3). During 1947-58, the average harvest decreased to about 50,000 salmon. The 1959-77 average South Peninsula coho harvest was only 12,000 salmon, with only 67 coho salmon harvested in 1975. Catches increased substantially after 1978, averaging 306,405 salmon from 1983-92 (Table 3). In 1988, the largest reported catch occurred, 505,533 salmon. In 1928-50, Aleutian Islands

Management Area catches were combined with the South Peninsula; the Aleutian Islands contribution was probably insignificant. During years when Aleutian Islands coho harvests were separated from the South Peninsula harvest, the largest documented coho catch in the Aleutians was 4,400 salmon in 1918 and the catch totaled less than 200 salmon during most years (Shaul et al. 1993).

Chinook salmon are of minor commercial importance in South Peninsula waters. During 1973-92, commercial catches averaged 6,751 and ranged from 117 in 1975 to 26,571 in 1983 (Table 3; Figure 14). There are no chinook spawning systems in South Peninsula waters. Chignik River is the only known chinook salmon producer on the Pacific side of the entire Alaska Peninsula (Quimby and Owen *In Press*).

All South Peninsula fisheries are usually closed from late August to September 1 to achieve pink and chum salmon escapements. Fisheries after September 1 are self limited to a few purse seine fishers during the first week of September and set gillnet fishers through mid to late September.

There are about 185 salmon systems in the South Peninsula area with sockeye salmon found in 23, pink salmon in 110, and chum salmon in 72 (Murphy 1992). To date, 57 South Peninsula coho producing systems have been identified (Shaul et al. 1992, 1991, and 1990). Two methods are used to calculate escapements: 1) indexed escapement (Appendix B), and 2) estimated escapement (Johnson and Barrett 1988). The indexed escapement method is used on non-weired systems where aerial surveys are used to estimate escapements (Appendix B). This method is used inseason and for historical comparisons because the estimated escapement method has only been employed since 1986. Escapement data are mostly limited to sockeye, pink, and chum salmon. Escapement estimates are total indexed counts except for Orzinski which currently is the only weir operation in the South Peninsula. Orzinski (Orzenoi) was weired during 1929-41 and 1990-93. Due to the importance of Orzinski sockeye in determining fishing time for the Northwest Stepovak Section, the amount of attention this area receives in regards to potential Chignik sockeye interception, and the difficulties involved with estimating fish from the air, the weir was reinstated in 1990. Indexed estimates are likely lower than the actual totals. Consequently there will be differences after 1984 between figures used in area management reports and those in formally published reports (technical data reports, bulletins, etc.) which use different expansion factors.

The 1973-92 average indexed salmon escapement in the South Peninsula was 2,494,405 salmon and included 63,230 sockeye, 1,971,800 pink, and 455,000 chum salmon (Table 8). The 1983-92 average is similar to the 20-year (1973-92) average, the 10-year (1983-92) indexed salmon

escapement was 2,733,780 salmon and included 72,650 sockeye, 2,162,420 pink, and 489,960 chum salmon.

#### 1993 SEASON SUMMARY

In 1993, the South Peninsula salmon harvest was 14,899,999 salmon comprised of 14,413 chinook, 3,689,074 sockeye, 220,148 coho, 9,928,107 pink, and 1,048,257 chum salmon (Table 9). The 1993 total harvest was the third or fourth largest catch since 1908; the total catch was larger during 1992, 1984, and perhaps in 1936 (in 1936 South Peninsula catches were combined with Aleutian Islands Area catches). The 1993 South Peninsula chinook harvest was the eighth largest (1932, 1934, 1939, 1943, and 1945 catches include both the South Peninsula and Aleutian Islands catches; the Aleutian Islands harvest is usually less than 100 fish; Figure 14). The 1993 harvest of sockeye salmon was the largest catch on record, only the 1980 catch of 3,613,025 and 1936 catch of 3,662,600 salmon come close to the harvest (Figure 12). The coho salmon harvest was the second lowest in the past 10-years, only in 1985 was the catch lower (Figure 13). The pink harvest was the shervest was the second lowest since 1980, only in 1989 was the harvest lower (Figure 11).

Most chinook, coho, pink, and chum salmon were harvested in the Southeastern District and most sockeye salmon were harvested in the Unimak District (Table 10). Purse seine fishers harvested 86.0% of all salmon, drift gillnet fishers 7.4%, and set gillnet fishers harvested 6.6% (Tables 11-14). Purse seine fishers caught the majority (80.3%) of the chinook, sockeye (60.2%), coho (69.5%), pink (96.5%), and chum salmon (81.1%).

In 1993, nearly all Area M CFEC permits were used; of the 125 purse seine permits available 123 were used, of the 164 drift gillnet permits available 162 were used and all 114 of the set gillnet permits were used (Table 1).

In 1993, the South Peninsula total indexed escapement of sockeye salmon was 100,341 fish, well within the center of the escapement goal (67,800-135,600 salmon; Figure 15; Appendix B). The pink total indexed escapement was 2,990,140 salmon, near the upper goal for odd year escapements (1,600,000-3,180,000 salmon; Figure 16). The chum total indexed escapement was 397,030 salmon, slightly above the lower goal (350,000-690,000 salmon; Figure 17). The South Peninsula total estimated escapement was 107,095 sockeye, 16,608 coho, 4,409,373 pink, and 553,246 chum salmon (Table 7; coho escapement data are based on limited surveys).

In 1993, the total estimated value of the South Unimak and Shumagin Islands June fisheries was \$14,190,582, the post June fisheries accounted for \$9,673,26. The yearly exvessel earnings were \$23,863,846 (Tables 15 and 16).

## South Unimak and Shumagin Islands June Fisheries

### Introduction

The South Unimak (Figure 18) and Shumagin Islands (Figure 4) June fisheries date to at least 1911 (Table 3). The dominant stocks targeted by these fisheries are Bristol Bay bound sockeye salmon, which has caused controversy between Alaska Peninsula and Bristol Bay fishers for many years (Eggers et al. 1991). During the early to mid-sixties the South Unimak and Shumagin Islands fisheries were open five days a week to commercial salmon fishing (Table 17). During the late sixties to early seventies, the fisheries were open seven days per week regardless of the run strength of Bristol Bay sockeye salmon. This caused many debates at Alaska Fish and Game Board meetings, with special meetings occurring over this issue during the early seventies. South Unimak and Shumagin Islands June management strategy was decided on a year-by-year basis during 1972-1974 due to very low projected Bristol Bay sockeye salmon returns. In 1974, both fisheries were closed during June.

After 1974, the Alaska Board of Fisheries (BOF) implemented an allocation plan where the South Unimak and Shumagin Islands June fisheries would be granted an annual guideline harvest level based on the predicted Bristol Bay inshore sockeye salmon harvest. Based on historic catch data, 6.8% of the forecasted inshore Bristol Bay harvest was allocated to the South Unimak June fishery and 1.5% was allocated to the Shumagin Islands fishery. To reduce the possibility of overharvesting any segment of the Bristol Bay run, the guideline harvest was allocated to discrete time periods based on historical catch data. The allocation in percent by time period is as follows:

Time Periods	South Unimak	Shumagin Islands
June 1 - 11	5%	9%
12 - 18	29%	28%
19 - 25	51%	41%
<u> 26 - 30</u>	<u>15%</u>	22%
Total	100%	100%

If the guideline harvest for an individual time period was not reached, the unharvested portion was lost to the fishery. If the guideline harvest for an individual time period was exceeded, the overharvest was subtracted from the total season allocation.

Chum salmon are harvested incidental to the targeted sockeye salmon during the South Unimak and Shumagin Islands June fisheries. In 1982, an unusually large harvest of 1,095,044 (Table 18) chum salmon occurred. The fall Yukon River chum salmon returns were weak that year which increased concerns of Arctic-Yukon-Kuskokwim (AYK) fishers who wished to curtail or eliminate the South Peninsula June fisheries. Unlike sockeye, which are predominantly bound for Bristol Bay and which have recently had large returns; chum salmon are bound for a variety of areas ranging from Japan to Kotzebue to Prince William Sound, and have recently had poor returns, especially in AYK river systems (Eggers et al. 1991, Ogura and Ito 1994, Kron 1994).

In 1984, in an effort to decrease the chum salmon catch, the BOF placed further restrictions on the fishery. The new restrictions consisted of allowing no more than 96 hours of fishing during a seven day period and no more than 72 consecutive hours of fishing. This regulation allowed for closed fishing periods (referred to as windows) between open periods to increase the opportunity for chum salmon to escape the South Peninsula June fisheries.

During 1986 only, the following additional restrictions also applied:

- 1. No fishing prior to June 11.
- 2. No fishing during June 26-30 and the loss of that periods allocation.
- 3. A 400,000 chum salmon catch limit (chum cap).

These restrictions, plus low availability of sockeye salmon, resulted in only 471,397 of the 1,107,000 sockeye salmon allocation being harvested.

The fall 1986 BOF meeting adjourned (with three members resigning), without taking action on the South Unimak and Shumagin Islands June fisheries. The regulations passed in 1986 were dropped and the fisheries were managed similar to the 1984-1985 June fisheries.

A sockeye and chum salmon tagging project in the South Unimak and Shumagin Islands fisheries was carried out during June, 1987. The project indicated that chum salmon are essentially from every stock in the North Pacific and Bering Sea while the bulk of the sockeye salmon were from Bristol Bay (Eggers et al. 1991). The Yukon River fall chum salmon stock was one of the major concerns for this study; the contribution of this stock to the South Peninsula June fisheries was considered small.

During the spring 1988 BOF meeting, a 500,000 (fish) chum cap was placed on the South Unimak and Shumagin Islands June fisheries (once a total of 500,000 chum salmon were harvested the fishery will be closed; Shaul and Schwarz 1989). It would be difficult or impossible to harvest the sockeye allocation during many years due to the chum cap. In 1988, the South Unimak sockeye harvest was reduced by an estimated 669,000 salmon due to the 500,000 chum cap. The 669,000 reduction is in addition to an estimated reduction of 117,000 sockeye salmon that resulted from other management plan restrictions (ie. no more than 96 hours to be fished in any 7 day period and nor more than 72 consecutive hours). The Shumagin Islands fishery harvested its 1988 sockeye allocation.

In 1989, South Peninsula fishers harvested the June sockeye allocation (Shaul et al. 1990). However, this was due to a low Bristol Bay forecast, and consequently low South Unimak and Shumagin Islands allocations (Tables 18-20). If the Bristol Bay inshore sockeye harvest had been perfectly predicted, the South Unimak fishery harvest would have been approximately 400,000 sockeye short of its allocation, due to the 500,000 chum cap. Sockeye catch rates were so high in the Shumagin Islands that fishers there could have easily harvested an accurate forecast before the chum cap was reached.

Following the 1989 season, the BOF made the following changes to the South Unimak and Shumagin Islands June fisheries (ADF&G 1992; Appendix A):

- 1. The starting date of the fishery was delayed until June 13; the sockeye to chum salmon ratio usually improves after June 12.
- 2. The chum cap for both fisheries combined was raised from 500,000 to 600,000 salmon.

- 3. The "window regulations" were eliminated, there did not seem to be a need for both a chum salmon cap and windows (Eggers et al. 1991).
- 4. The sockeye allocations and time periods became the same for each fishery.

Time Periods	South Unimak and Shumagin Islands
June 13 - 18	35%
19 - 25	45%
<u> 26 - 30</u>	20%
Total	100%

If catches in either fishery fall below the guidelines in the June 13-18 period, those unharvested sockeye salmon up to a maximum of five percent of the total allocation for that fishery may be harvested during the June 19-25 period. The June 26-30 period cannot be used to make up for underharvests during the first two periods. Available data and understanding of the data indicated that the sockeye salmon stock composition between the first two periods was very similar, however the June 25-30 stock composition at South Unimak and the Shumagin Islands fisheries may be dominated by fewer and later running stocks.

- 5. Unlimited seine leads were eliminated at South Unimak, leads of 50 to 150 fathoms are the only legal lengths for the entire Alaska Peninsula.
- 6. Maximum depth restrictions were placed on all seine and gillnet gear. For the entire Alaska Peninsula Area, seine depths may not exceed 375 meshes in depth. Seine mesh may not exceed 3-1/2 inches except the first 25 meshes above the lead line may not be more than 7 inches. Gillnet gear used in South Peninsula waters may not exceed 90 meshes in depth.
- 7. The area comprising the South Unimak fishery was extended to include the following portions of the Southwestern District located outside the Ikatan Bay Section:

- (a) all waters north and west of a line from Cape Pankof Light to Thin Point.
- (b) all waters enclosed by a line from Thin Point to Stag Point on Deer Island to Dolgoi Cape and from Bluff Point on Dolgoi Island to Arch Point.

In 1990, sockeye salmon were not available in large numbers at either the Shumagin Islands or South Unimak fisheries despite the fact that Bristol Bay experienced one of its largest runs on record (Shaul et al. 1991). Windy weather plagued fishing operations but fish abundance also seemed low, especially in view of the large run that returned to Bristol Bay. The Shumagin Islands sockeye salmon harvest was 255,649 fish with a guideline harvest of 240,000 (Table 19). During June, the Shumagin Islands fishery was open to commercial salmon fishing a total of 198 hours during 9 days (Table 21). The South Unimak fishery sockeye salmon harvest was 1,090,710 fish with a guideline harvest of 1,087,000 (Table 20). During June, the South Unimak fishery was open to commercial salmon fishing for 267 hours during 13 days (Table 21). The chum salmon catch totaled 518,755 salmon; the catch in the Shumagin Islands fishery was 63,517 salmon and in the South Unimak fishery was 455,238 salmon (Tables 18-20).

If the 1990 Bristol Bay forecast had been perfectly forecast, the South Unimak and Shumagin Islands guideline harvest levels would have been 2,347,000 and 518,000 respectively (Tables 22-24). However, due to the 600,000 chum ceiling, the South Unimak fishery would have fallen about 1,050,000 sockeye salmon short of its allocation while the Shumagin Islands fishery would have fallen about 35,000 sockeye salmon short of its corrected allocation. If there were no chum salmon cap, the Shumagin Islands fishery would have easily taken its sockeye salmon allocation, with an estimated chum salmon harvest of about 135,000 salmon. Even without a chum salmon cap, the South Unimak fishery would have harvested only about 1,600,000 of its corrected allocation while catching an estimated 700,000 chum salmon.

The 1991 regulations governing the South Peninsula fisheries were similar to the 1990 regulations. In 1991, the Shumagin Islands June sockeye salmon harvest was 337,115 salmon, slightly under the 347,000 allocation, the chum salmon harvest was 105,711 salmon (Table 19). At South Unimak the sockeye catch was 1,216,035 salmon, well under the 1,573,000 allocation (Table 20). The South Unimak fishery chum salmon harvest was 670,409 salmon; when combined with the Shumagin Islands fishery chum salmon catch the total harvest equalled 776,120 salmon, which exceeded the chum cap and by regulation both fisheries closed.

In November 1991, the BOF changed the South Unimak and Shumagin Islands June chum cap from 600,000 fish to 40 percent of the sockeye salmon allocation and the chum cap was not to exceed 900,000 chum salmon. Due to the large 1992 Bristol Bay sockeye salmon forecast, the chum salmon cap was established at 900,000 salmon. The 900,000 chum salmon cap generated a great deal of debate with Arctic-Yukon-Kuskokwim (AYK) Region fishers. The BOF relied extensively on the 1987 South Unimak and Shumagin Islands chum and sockeye salmon tagging study when they increased the chum cap (Eggers et al. 1991). An error in the 1987 tagging study was discovered which indicated that the study had underestimated the impact of the South Unimak and Shumagin Islands June fisheries on AYK chum salmon stocks, including those of Norton Sound. This provided enough new information for the South Unimak and Shumagin Islands chum salmon cap issue to be brought up for consideration again at the March 1992 BOF meeting in Juneau. After reconsideration, the BOF changed the chum salmon cap to an annual 700,000 fish limit (ADF&G 1992).

Prior to the 1992 South Peninsula June fisheries, ADF&G acted to minimize the harvest of chum salmon. ADF&G closed waters around Sanak Island, bounded by the latitude of Hague Rock and the longitude of Cape Pankof Light below Hague Rock's latitude to commercial salmon fishing during June (Figure 18; Shaul et al. 1993). Historically, Sanak Island waters had been fished sporadically, but had produced unacceptably low sockeye to chum salmon ratios.

In 1992, the South Unimak catch was 2,046,022 sockeye and 323,891 chum salmon (Table 25). The Shumagin Islands fishery produced a catch of 416,653 sockeye and 104,245 chum salmon. The Shumagin Islands sockeye catch was below the 432,000 allocation, while the South Unimak fishery exceeded its sockeye allocation by more than 87,000 salmon. Because the total June sockeye catch (2,462,675 salmon) exceeded the combined June allocation (2,391,000 salmon) both fisheries were closed. The combined chum harvest was 428,136 salmon, well below the 700,000 chum cap (Table 25). If the 1992 Bristol Bay forecast has been perfectly forecast, the combined South Unimak and Shumagin Islands guideline harvest levels would have been 2,857,000 salmon (Tables 22-24). If the perfect forecast was available, the South Unimak and Shumagin Islands fisheries would have been able to catch the additional 399,144 sockeye salmon and remained below the 700,000 chum cap.

Test fishing in the Shumagin Islands during June was instituted in 1990 to aid the South Peninsula management staff in determining sockeye to chum salmon ratios and salmon average weights by species (Shaul et al. 1993). ADF&G attempts to have commercial salmon fishing periods when the catch of sockeye salmon is expected to be high in relation to a low chum salmon catch. The ratio of sockeye to chum salmon is normally low in early June, highest when

the sockeye run is peaking during mid to late June and during some years is again low during late June (Shaul et al. 1992). During 1970-92, most sockeye and chum salmon were harvested during June 12-26 in both the Shumagin Islands and the South Unimak fisheries.

Test fishing occurs before the June 13 regulated opening date and between commercial salmon fishing periods, if time allows, to determine the most favorable periods of sockeye to chum salmon ratios. Test fishing was standardized to purse seine gear making 20 minute sets at Popof Head, Middle Set, and Red Bluff; additional sets are made if time allows (Figure 19; McCullough and Shaul 1992). During off-loading, the catch is separated by species, counted, and weighed. Purse seine vessels are selected randomly from a list of skippers that have expressed an interest in the test fishery. The skipper and usual crew are aboard as well as an ADF&G observer.

In 1990, test fishing occurred on June 10 and resulted in a 3.8:1.0 sockeye to chum salmon ratio and the fishery was opened on June 13 (Shaul et al. 1992). In 1991, test fishing occurred on June 9-13. The ratio of sockeye to chum salmon prior to June 12 was not favorable for a commercial fishing period. On June 13, the ratio improved to 3.3:1.0 and on June 14 was 4.7:1.0. In 1991, the first commercial period was on June 15, the commercial ratio was 3.4:1.0. In 1992, test fishing in the Shumagin Islands occurred on June 9-13 (Shaul et al. 1993). The ratio of sockeye to chum salmon on June 9 was acceptable (3.2:1.0) but decreased on June 10 (0.8:1.0) and June 11 (0.5:1.0). The ratio improved on June 12 (1.6:1.0) and indicated further improvement on June 13 (3.3:1.0). The first commercial period was on June 15, the commercial ratio was 3.4 sockeye to chum salmon in the Shumagin Islands and 8.5 sockeye to chum salmon in the South Unimak fishery.

It is not known what impact the reduction in gear depth, adopted by the BOF prior to the 1990 season had on gear efficiency or if the gear reduction caused a reallocation of the salmon resources between gear types. There are too many other factors influencing the harvest each year to determine how the gear changes alone effect the harvest (ADF&G 1992).

## South Unimak and Shumagin Islands June 1993 Season Summary

Based on the 1993 Bristol Bay forecast, the 1993 sockeye guideline harvest levels were as follows (McCullough and Shaul 1993):

		South	Shumagin	
Period	Percent	Unimak	Islands	Total
June 13 - 18	35%	831,000	183,000	1,014,000
June 19 - 25	45%	1,069,000	236,000	1,305,000
June 26 - 30	20%	475.000	105,000	580,000
Total	100%	2,375,000	524,000	2,899,000

In 1993, the South Unimak and Shumagin Islands Section June fisheries first fishing period occurred on June 13. Initial test fishing in the Shumagin Islands Section on June 7-10 resulted in acceptable sockeye to chum salmon ratios (4.6:1.0, 8.2:1.0, 3.6:1.0, and 8.2:1.0 respectively; Table 26). June 11 test fish results were not used due to a large discrepancy between species counts on the vessel and by cannery personnel.

The first fishing period was announced for 6:00 a.m. until 10:00 p.m. during June 13 in both fisheries (Appendix A). The June 13 South Unimak catch was 283,755 sockeye and 37,965 chum salmon (Tables 27-31), a 7.5:1.0 sockeye to chum salmon ratio. In the Shumagin Islands fishery, the June 13 harvest was 91,570 sockeye salmon and 9,720 chum salmon, a 9.4:1.0 sockeye to chum ratio (Tables 31-34). Both fisheries reopened on June 15 with large sockeye catches and high sockeye to chum salmon ratios. The Shumagin Islands fishery was closed on June 16 to enable staff to updated catch statistics, while the South Unimak fishery with its larger allocation was extended through June 16. Both fisheries open on June 17; tender reports indicated that the June 13-18 catch in the Shumagin Islands were near the time period allocation, while the catch in the South Unimak fishery had exceeded the first period allocation. Fishing during the June 13-18 period resulted in a Shumagin Islands sockeye catch of 179,253 and a chum catch of 23,301; a 7.7:1.0 sockeye to chum ratio. In the South Unimak fishery the catch was 1,147,554 sockeye and 165,260 chum salmon for a 6.9:1.0 sockeye to chum ratio. For both fisheries combined the catch was 1,326,807 sockeye and 188,561 chum salmon for a combined ratio of 7.0:1.0 sockeye to chum salmon.

In the June 19-25 period, both fisheries were open during three days. The Shumagin Islands catch was 261,859 sockeye and 33,746 chum salmon, for a 7.8:1.0 sockeye to chum salmon ratio. The South Unimak fishery catch was 1,044,909 sockeye and 191,714 chum salmon, for a 5.5:1.0 sockeye to chum salmon ratio. For both fisheries combined the catch was 1,306,768 sockeye and 225,460 chum salmon for a 5.8:1.0 sockeye to chum ratio.

In the June 26-30 period, the Shumagin Islands fishery was open during 2 days and the South Unimak fishery was open during 3 days. The Shumagin Islands fishery catch was 166,059 sockeye and 93,259 chum salmon, for a 1.8:1.0 sockeye to chum salmon ratio. The South Unimak fishery catch was 174,110 sockeye and 24,967 chum salmon, for a 7.0:1.0 sockeye to chum salmon ratio. For both fisheries combined the catch was 340,169 sockeye and 118,226 chum salmon for a 2.9:1.0 sockeye to chum salmon ratio. The most notable occurrence during this period was the poor sockeye to chum salmon ratio in the Shumagin Islands.

In total, the Shumagin Islands fishery was open during 8 days and the South Unimak fishery was open during 10 days (Table 21). The Shumagin Islands fishery catch totaled 607,171 sockeye and 150,306 chum salmon (Table 31); the fishery was 83,171 sockeye salmon over the guideline harvest level. The South Unimak fishery catch totaled 2,366,573 sockeye and 381,941 chum salmon; the fishery was 8,427 sockeye salmon below the guideline harvest level. For both fisheries combined the catch was 2,973,744 sockeye and 532,247 chum salmon; 74,744 sockeye salmon more than the guideline harvest level and 167,753 chum salmon less than the cap. The guideline harvest level was exceeded mainly due to the delivery of some salmon outside the Shumagin Islands, when some purse seine fishers moved from the Shumagin Islands to the South Unimak fishery. These landings were not reported to the Sand Point management staff.

During the 1993 June fishery, purse seine fishers harvested 59.1% (1,397,481; Tables 27-28) of the South Unimak sockeye salmon and 87.5% (531,258; Tables 32-33) of the sockeye salmon caught in the Shumagin Islands. Drift gillnet and set gillnet fishers accounted for 38.2% (902,788) and 2.8% (66,304) of the South Unimak sockeye salmon harvest, respectively (Tables 27-30). Set gillnet fishers accounted for 12.5% (75,913) of the Shumagin Islands sockeye salmon harvest (Tables 32 and 34). Purse seine fishers harvested 66.2% (252,798) of the South Unimak chum salmon and 97.9% (98,509) of the chum salmon caught in the Shumagin Islands (Tables 32-33). Drift gillnet and set gillnet fishers harvested 31.6% (120,820) and 2.2% (8,323) of the South Unimak chum salmon, respectively (Tables 27, 29 and 30). Set gillnet fishers accounted for 2.1% (3,146) of the Shumagin Islands chum salmon harvest (Tables 32 and 34). For both fisheries combined purse seine fishers harvested 64.9% of the sockeye and 75.1% of the chum salmon, drift gillnet fishers harvested 30.4% of the sockeye and 22.7% of the chum salmon, while set gillnet fishers harvested 4.8% of the sockeye and 2.2% of the chum salmon (Tables 35 and 36; Figures 20 and 21). During June, the sockeye to chum salmon ratio at South Unimak was 6.2:1.0 and in the Shumagin Islands was 4.0:1.0 and for both fisheries combined was 5.6:1.0 (Tables 37-39). During June 116 purse seine, 140 drift gillnet, and 72 set gillnet permit holders commercially fished in South Peninsula waters (Table 40).

### South Peninsula Post June Fisheries

### Introduction

Post June text and data will be presented as: 1) South Peninsula as a fishery (Figure 22); 2) Southeastern District as a fishery with the Shumagin Islands fishery treated separately from the Southeastern District Mainland fishery; 3) McGinty Point to Moss Cape area; 4) Belkofski to Kenmore Head area; and 5) Kenmore Head to Scotch Cap area. Reasons for discussing the post June fisheries in these units include: 1) the Southeastern District Mainland fishery has a separate management plan from the balance of the South Peninsula (5 AAC 09.360; Figure 8); 2) the Shumagin Islands Section is a manageable area to discuss separately; 3) the McGinty Point to Moss Cape area, although noted for its local pink and chum production, also harvests migratory sockeye salmon in cape areas; 4) the Belkofski to Kenmore Head area harvest is dominated by pink and chum salmon with local sockeye runs in Thin Point Cove, Cold Bay and Morzhovoi Bay, but also includes migratory sockeye salmon of unknown origin which are harvested in the vicinity of Belkofski Bay, Deer Island, and King Cove; and 6) the Kenmore Head to Scotch Cap area combines the only area in South Peninsula waters where drift gillnet gear is allowed (Figures 9 and 22). Post June South Peninsula tags from sockeye salmon have been returned from South and North Peninsula systems, Bristol Bay, Chignik, Kodiak, and Cook Inlet (McCullough 1990).

Prior to 1992, South Peninsula waters east of Rock Island (Figure 23) opened to commercial salmon fishing about July 6, except in the Southeastern District Mainland fishery, which is managed prior to July 26 on a separate management plan (Appendix A: 5 AAC 09.360). Prior to 1976, post June South Peninsula fisheries were open five days per week, with total season closures on August 10 to provide adequate escapement and maintain product quality (McCullough et al. 1993). From about 1976 to 1991, the salmon fishery was managed by emergency order based on local stock run strength. Fishing periods from July 6 to about July 18 were based on chum salmon run strength, and from July 18 through about August 20 on pink salmon run strength (Figures 10 and 11). Fishing continued into late August in years of strong pink runs. Migratory salmon were also harvested during these openings, and contributed a substantial portion of the total post June harvest in some years (Figures 12 and 13). Emergency orders based on coho runs allowed fishing in September.

In November 1991, the BOF established the Post June Salmon Management Plan for the South Alaska Peninsula (Appendix A: 5 AAC 09.366; McCullough et al. 1993). This plan allows for the harvesting of local stocks through July 20 in terminal areas, but closes the remainder of the South Peninsula formerly opened in post June fisheries. The BOF decision was based on the

concept that local pink and chum salmon could be caught in terminal areas early in the season without sacrificing product quality, while at the same time allowing migratory salmon to pass through the South Peninsula area. After July 19, the board concluded that South Peninsula fishers needed to catch pink salmon in their traditional cape harvest areas to maintain product quality and to allow for available processing capacity. Under this new plan, commercial salmon fishing from July 6-19 was to be restricted to terminal fishing areas opened by emergency order, based on local stock run strength as gauged by harvest and escapement rates. These areas include Zachary Bay and Inner Pavlof Bay, and the Cold Bay, Thin Point, Canoe Bay, and Morzhovoi Bay Sections. From July 20 through the remainder of the commercial salmon season, the entire South Peninsula could be opened to commercial salmon fishing by emergency order based on local stock strength.

After the closure of South Peninsula June fisheries, fishers had the choice of moving to areas within the Alaska Peninsula Management Area remaining open (portions of the North Peninsula and Aleutian Islands), remaining in the South Peninsula area for likely one day a week fishing periods, or to remain on the beach until July 20.

In accordance with an order issued on July 10, 1992 by Alaska State Superior Court an injunction staying the enforcement of 5 AAC 09.366 (the Post June Salmon Management Plan for the South Alaska Peninsula), a commercial salmon fishing period was announced for July 13-14, 1992; additional fishing periods were announced as conditions warranted (Shaul et al. 1993).

In March 1993, the Alaska State Superior Court reconsidered the 1992 injunction staying the enforcement of the Post June Salmon Management Plan. After reconsideration the court agreed with the State of Alaska and the Post June Salmon Management Plan was again in effect for the 1993 commercial fishing season.

Since 1974, post June catches of all species in the South Peninsula have averaged 6,354,138 salmon and ranged from 88,838 (1975) to 12,748,353 salmon (1984; Table 41). Catches have been more than one million salmon since 1975. The 1974-93 harvest averaged 3,264 chinook, 420,878 sockeye, 219,879 coho, and 4,982,033 pink, and 728,084 chum salmon. The 1984-93 (ten year) average catch, indicates an increased catch of each species as compared to the twenty year average. The ten year average catch is 8,442,482 salmon comprised of 4,231 chinook, 666,501 sockeye, 315,201 coho, 6,518,986 pink, and 937,565 chum salmon. Most post June South Peninsula salmon are harvested with purse seine gear although the sockeye salmon catch is more evenly distributed between purse seine and set gillnet gear (Tables 42-44).

The 1973-92 average indexed salmon escapement in the South Peninsula was 2,494,405 salmon and included 63,230 sockeye, 1,971,800 pink, and 455,000 chum salmon (Table 8). The 1983-92 average is similar to the 20-year (1973-92) average, the 10-year indexed salmon escapement was 2,733,780 salmon and included 72,650 sockeye, 2,162,420 pink, and 489,960 chum salmon.

#### **Immature Salmon Concerns**

In 1990, ADF&G instituted and standardized a test fishery prior to commercial fishing periods in July, in Shumagin Islands waters to determine the presence and abundance of immature salmon (McCullough and Shaul 1992, Shaul et al. 1993). During normal fishing operations, immature salmon of three species are sometimes inadvertently gilled in purse seine gear in South Peninsula waters: chinook, sockeye, and chum salmon.

Historically, the presence of immature salmon in South Peninsula waters has caused the curtailment of all commercial fishing in affected areas during late June or July in 1963, 1968, 1969, 1974, 1979, and purse seine fishing during 1989-92 (Shaul et al. 1993). After 1979, regulations were adapted curtailing only purse seine fishing in affected areas (ADF&G 1992). The problem associated with catching immature salmon is restricted to the purse seine fleet. Immature salmon are gilled in the seine webbing resulting in what is likely a 90-100% mortality factor. By regulation, seine mesh size may not be more than 3-1/2 inches except for the first 25 meshes above the lead line, which may not be more than 7 inches (ADF&G 1992). By regulation, gillnet mesh size can not be less than 5-1/2 inches; the larger mesh size in gillnet gear allows for unrestricted passage of immature salmon through gillnet gear.

Historically, immature salmon cause the greatest problem in the Shumagin Islands Section. In the Shumagin Islands Section, most purse seine fishing effort occurs in the near shore waters of Popof Island from Popof Head to Red Bluff (Figure 19). Deep water offshore of the beach allows nets to be deployed close to the shore. Twenty-minute sets, in vessel rotation, are used to catch salmon migrating westward. Catches of immature salmon were first brought to the attention of ADF&G in 1963. Currently, about 71 purse seine permit holders must either remain on the beach or move to other open areas that are not as productive as the Shumagin Islands. Immature salmon usually migrate out of the Shumagin Islands Section by July 23, although in 1992 closures remained in effect until July 29.

In 1990, test fishing was standardized to purse seine gear making 20 minute sets and fully pursing the gear. The test fish project uses commercial purse seines (ADF&G 1992). Sites used to set the gear included: Popof Head, Middle Set, and Red Bluff (Figure 19). Additional sets were

made if time allowed. If large numbers (greater than 1,000) of immature salmon were observed being gilled during any set, the set could be terminated prior to the 20 minute time limit. Each day a permit holder was randomly selected from a list of permit holders interested in the test fishery. The permit holder supplied all necessary fishing material and crew, while ADF&G supplied a biologist to count and identify by species the number of immature and mature salmon per set. Immature salmon were defined as any salmon gilled in seine webbing and weighing less than three pounds per fish (salmon below this weight are refused by buyers). Mature salmon were sold to pay charter cost and immature salmon were dumped at sea, unless they could be given away for subsistence use. During off-loading the mature catch was separated by species, counted, and weighed.

Immature salmon gilled in seine web have been opportunistically sampled in the Shumagin Islands. Since all catch sampling occurred before sorting within the fishing vessel and cannery, there was no preselection of immature salmon. Although not tested, each sample was assumed to be representative of the bycatch within the Shumagin Islands. While this insured that samples were randomly selected from each fishing vessel sampled, the samples may not be characteristic of the population structure because the distribution of the population is unknown in the fishery. Age has been determined by examining scales (Shaul et al. 1993). Length measurements have been taken from mid-eye to fork-of-the-tail. Sex compositions and sexual maturity have been computed for each sample. Sex and sexual maturity were determined by internal observation of the gonads.

## Post June Fisheries 1993 Season Summary

Prior to the general South Peninsula fishing period of July 20, ADF&G chartered purse seine vessels from July 12-18 to determine the abundance of immature salmon (Table 45). Test fish results from the Shumagin Islands were used as an indication of the presence of immature salmon in the South Central, Southwestern, and Unimak Districts of the South Peninsula. Portions of these districts have been closed to purse seine gear at times due to the presence of immature salmon. During the test fishery of July 12, 13, and 17 immature salmon were caught in sufficient numbers to warrant continued test fishing. Test fishing on July 15, 16, and 18 indicated a decreasing trend in the presence of immature salmon. ADF&G observations of the seine fleet during the July 20 fishing period and the remainder of the fishing season, indicated that the immature catch was acceptable (probably averaging less than 1 immature salmon per set) and did not warrant further purse seine closures. In 1993, test fishing indicated that most immature fish were sockeye salmon, on a daily basis were averaging 93.7% to 63.9% of the immature catch. Chinook and chum salmon made up the remainder of the immature catch.

In 1993, the post June South Peninsula salmon harvest was 11,217,921 salmon comprised of 4,541 chinook, 633,176 sockeye, 218,910 coho, 9,846,902 pink, and 514,392 chum salmon (Table 41). The 1993 post June harvest of chinook and pink salmon was larger than the 1984-93 average, while the sockeye, coho, and chum catch was less than the 1984-93 average. The coho catch was the lowest since 1985 (Table 46) and the chum catch was the lowest since 1979 (Table 41); the chinook, sockeye, and pink catch was similar to catches during the last three years (Tables 41 and 47). Purse seine gear caught most of the chinook, coho, pink, and chum salmon while set gillnet gear caught most of the sockeye salmon (Tables 41-44).

During the time period July 1-19, most salmon were caught in the Southeastern District Mainland fishery (Appendix A: 5 AAC 09.360). In those areas allowed to be open under authority of the Post June salmon management plan for the Southern Alaska Peninsula (Appendix A: 5 AAC 09.366) the catch totaled 21,060 salmon comprised of 8 chinook, 8,220 sockeye, 10 coho, 1,524 pink and 11,298 chum salmon (Tables 9, and 48-50).

When comparing reporting areas (Southeastern District, McGinty Point to Moss Cape, Belkofski Bay to Kenmore Head, and Kenmore Head to Scotch Cap) most post June salmon were harvested in the Southeastern District (Tables 51-63). Within the Southeastern District most chinook, coho, pink, and chum salmon were harvested in the Shumagin Islands Section and most sockeye salmon were harvested in the Southeastern District Mainland fishery (Tables 48 and 64-66).

The 1993 South Peninsula total indexed escapement was 3,487,400 salmon comprised of: 100,300 sockeye, 2,990,100 pink, and 397,000 chum salmon (Tables 67-69). No chinook spawn in South Peninsula waters and coho salmon escapement data are not collected annually. The 1993 sockeye indexed escapement was the second largest since at least 1962, exceeded only by the 1991 escapement. The pink escapement was also the second largest since at least 1962, exceeded only by the 1984 escapement. The chum salmon indexed escapement was less than the 10-year (1983-1992) average of 445,310 salmon. Using the indexed total escapement and only post June salmon catches, the South Peninsula pink salmon run was an estimated 12,837,200 salmon and the chum salmon run was an estimated 913,300 salmon (Tables 68 and 69). The 1993 total indexed sockeye escapement was 100,300 salmon (Table 67). Orzinski, Thin Point Lake, and Middle Lagoon were the primary production areas of local sockeye stocks (Table 6). Only two systems near Cold Bay were surveyed for coho salmon; those systems had average coho escapement. Excellent pink escapements were attained throughout South Peninsula streams. Chum escapements ranged from poor to excellent with Stepovak Bay escapements tending to be poor and escapements west of Stepovak Bay tending to be normal. When large pink runs occur the

intensive effort usually causes chum salmon stocks to be over harvested where the species mix; in 1993 expanded closed waters areas for chum salmon were used to increase escapements.

Using expansion factors for sockeye and coho salmon and the area-under-the-curve method (Johnson and Barrett 1988) to determine pink and chum salmon escapements, the South Peninsula total estimated escapement was 107,095 sockeye, 16,608 coho, 4,409,373 pink, and 553,246 chum salmon (Table 70; coho escapement data is incomplete due to the late timing of the runs). The 1993 total estimated sockeye escapement was 768 salmon greater than the 1986-92 average of 106,327 (Table 70; Murphy 1992, Shaul et al. 1993). The estimated total pink salmon escapement was 1,652,830 salmon greater than the 1986-92 average (2,756,543 salmon) and the chum salmon estimate was 3,341 more than the average (549,905 salmon).

Southeastern District. The Southeastern District is divided into two fisheries: 1) Southeastern District Mainland fishery (SEDM) and 2) Shumagin Islands fishery (Figure 3).

## Southeastern District Mainland Fishery

### Introduction

Although the SEDM fishery typically occurs from mid-June through mid-September the discussion of this fishery is included in the post June fisheries section of this report because most of the fishery occurs post June. The SEDM fishery is unique in many respects to other fisheries and has a management plan separate from the balance of the Alaska Peninsula (McCullough and Campbell 1993; Appendix A: 5 AAC 09.360).

The Southeastern District Salmon Management Plan covers the time period from June 1 (the beginning of the salmon season) through July 25 for fishing activity in the SEDM area of the Southeastern District. This plan allocates a percentage of the Chignik sockeye salmon harvest in the SEDM fishery to South Peninsula purse seine and set gillnet limited entry permit holders when specific biological and harvest criteria are met in Chignik. After July 25, when the management plan is no longer in effect, fishing periods through August are based on pink and chum runs, while in September and October they are based on pink, chum, and coho runs. The earliest date of the first landing from 1970-93 occurred on June 4, 1984 and the latest date of the last landing occurred on October 9, 1987.

The SEDM fishery includes Beaver Bay, Balboa Bay, Southwest Stepovak, Northwest Stepovak, Stepovak Flats, and East Stepovak Sections (Figure 8). Fishing effort during June and most of

July is primarily targeted on Chignik destined sockeye salmon except in Orzinski Bay, where effort is targeted on the local Orzinski sockeye salmon run. Through July 25, the Southeastern District Salmon Management Plan is in effect (Appendix A). The management plan allocates seven percent of the total Chignik destined sockeye harvest to fishers in the SEDM fishery. Besides the local sockeye salmon run at Orzinski Lake in the Northwest Stepovak Section, there is an early July chum salmon run in the Stepovak Flats Section. Orzinski Bay and the Stepovak Flats Section are managed on a local stock basis throughout the season. After July 25, the entire area is managed for local stocks, primarily pink and chum salmon through August 31 and coho salmon in September.

During late-July through mid-August pink and chum runs are peaking. The fishery is usually closed during mid-to-late-August to top off escapements and is opened again in September for coho salmon. Sockeye salmon are migrating through the area during the entire season.

Through July 25, as near as possible to seven percent of the total estimated Chignik destined sockeye catch is allowed to be taken in that portion of the SEDM located outside Orzinski Bay. However, if it appears that the Chignik Management Area sockeye catch will not reach 600,000 through July 25, then there will be no commercial fishery targeting Chignik sockeye salmon in the SEDM prior to July 26. Similarly, in the Kodiak Management Area, salmon fishing is restricted when fishers target Chignik destined sockeye salmon in the Cape Igvak Section. No fishing targeting Chignik stocks in the SEDM or Cape Igvak fisheries is allowed until the run passing through those locations is assessed to be in excess of escapement requirements. The assessment is made by the Chignik Area Management Biologist. The total Chignik destined sockeye catch is estimated by adding 80 percent of the SEDM (excluding the harvest in Orzinski Bay) catch, 80 percent of the Cape Igvak catch, plus the entire Chignik Management Area sockeye catch. The present management plan has evolved from allocation plans that were first used for the SEDM during the 1985 season. A similar plan has been used at Cape Igvak since 1978.

Historically, the SEDM fishery produced minor harvests. During 1974 through 1977, the fishery was open on a day to day basis with Chignik Lagoon. During some years, such as 1977 (when little fishing time was required to harvest large runs in Chignik Lagoon and daily interception rates in the SEDM area were low), the result was a disastrous season for SEDM fishers.

For the 1978 season, the BOF allowed three fishing days per week in the SEDM fishery through July 10 and made set gillnets the only legal gear during that period. Interception rates were low despite strong Chignik runs and catches were poor for the few set gillnet fishers in the SEDM

fishery. From 1970 through 1978, an average of 18 set gillnet permit holders participated in the fishery.

During the winter of 1978-79, the BOF increased fishing time to five days per week but specified that not more than 60,000 Chignik sockeye salmon could be taken through July 10. However, the fishery could be closed if it became apparent that a closure was needed to assure the attainment of Chignik escapement requirements. Also, if the Chignik Management Area harvest exceeded 1,000,000 sockeye salmon before July 10, the SEDM fishery could continue beyond the 60,000 ceiling.

During 1979-82 SEDM fishers experienced good seasons even through closures were needed at times because of weak Chignik escapements. During this period, participation increased from 31 to 41 permit holders (Table 75).

In 1983, gear levels did not change drastically, but the fishery demonstrated an ability to catch large numbers of salmon during a short period of time when the July 7-8 total sockeye catch was about 49,615 salmon. The 1983 season was a very good year for SEDM fishers with the season estimated interception of Chignik destined sockeye reaching 227,392 (Table 71). Most of the sockeye salmon were taken between July 10 and August 10.

The 1984 season saw a dramatic increase of set gillnet gear, set gillnet permit holders totaled 57. Several of the gillnet permit holders also held purse seine permits and fished gillnet gear only during part of the season. Consequently, there were about 43 full time set gillnet permit holders fishing. Due to the large early Chignik run, the large number of these salmon available in the SEDM, and the increased amount of gear, only six days were required to harvest 60,000 Chignik destined sockeye. However, the fishery was closed for only three days before the Chignik catch reached 1,000,000 salmon. The SEDM fishery was reopened on June 14 using the fishing periods listed in the regulation book (five days per week). It was forecasted that the 1984 second Chignik sockeye run would be very strong. This later proved to be incorrect. The Chignik escapement goal was reached on the second run only after considerable curtailment of the SEDM, Chignik, and Cape Igvak (Kodiak Management Area) fisheries during mid-July. The 1984 SEDM catch of sockeye salmon through July 25 was 595,043 salmon and the estimated interception of Chignik destined sockeye was 423,068 salmon (Tables 71 and 72).

The 1964-92 catch of Chignik destined sockeye salmon through July 25 has ranged from 4,485 salmon (0.88% of the total Chignik bound sockeye salmon catch) in 1989 to 423,068 salmon (12.64%) in 1984 (Tables 73 and 74; Figure 26). Both purse seine and set gillnet annual CFEC

permits used in the fishery, as well as annual landings, have increased substantially since the early to mid-1970's. The 1984-93 annual CFEC permits used by purse seine permit holders average 58 and by set gillnet permit holders average 55 (Table 75). The 1983-92 annual purse seine landings average 265 and set gillnet landings average 1,122. Since 1970, the number of sockeye salmon caught by each gear type has varied considerably, the 1970-93 average catch through July 25 by purse seine fishers is 11.5% and by set gillnet fishers is 88.5%; for the entire season the average catch by purse seine fishers is 17.7% and for set gillnet fishers is 82.3% (Tables 72 and 76; Figure 27).

Since 1985, when the original Southeastern District Management Plan was in effect, the harvest of Chignik destined sockeye salmon has ranged from 0.88% in 1989 to 8.88% in 1990 and averaged 6.4% (Tables 73 and 74; Figure 26). The 1988 and 1989 percentages were low due to the pre-July 26 Chignik Management Area sockeye harvest marginally reaching or failing to meet the 600,000 sockeye salmon harvest objective. In 1990, the catch of Chignik destined sockeye salmon through July 25 exceeded the six percent allocation because of large catches during the July 18-19 period, lower than anticipated harvests at Cape Igvak, and an underestimation of the catching power of the fishing fleet, especially the purse seine fleet that has chilled fish tanks and hold fish for up to 48 hours before delivering.

In 1990, ADF&G installed a weir at Orzinski Lake (Shaul et al. 1991). Since 1990, the sockeye escapement goal of 20,000 salmon has been met or exceeded, except in 1990 when the escapement was 15,000 sockeye salmon (Table 77).

The present management strategy, described earlier, was adopted after the 1984 season. Since 1984, the management plan has remained the same, with few exceptions. During November 1991, the BOF made changes to the Southeastern District Salmon Management Plan (ADF&G 1992; Shaul et al. 1992). The major changes effecting the plan were: 1) the percentage of Chignik destined sockeye salmon permitted to be harvested in the SEDM was increased to seven percent, 2) the area where 80 percent of the sockeye salmon caught in the fishery are determined to be of Chignik origin was increased and now include the East Stepovak, Stepovak Flats, Northwest Stepovak (except Orzinski Bay; Figure 8), Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and 3) 100 percent of the sockeye salmon caught in Orzinski Bay were considered to be local (Orzinski Lake) sockeye and would not be included in the allocation. All other provisions of the management plan remained the same as in prior years.

The BOF during the November 1991 meeting also impacted the SEDM fishery by closing most of the South Peninsula outside of the SEDM to commercial salmon fishing from July 1-20

(ADF&G 1992; Shaul et al. 1992). BOF discussion of the post June fisheries noted the unique nature of the SEDM fishery from the balance of the South Peninsula. The BOF allowed terminal chum and pink salmon areas to be opened where local July pink and chum salmon could be harvested (Zachary Bay in the Shumagin Islands Section). One impact of the BOF decision closing most of the South Peninsula from July 1-20, while leaving other limited areas open was a concentration of fishing gear from July 1-20 in any area open to commercial fishing.

The SEDM management plan (modeled after the Kodiak, Cape Igvak Management Plan 5 AAC 18.360; Prokopowich et al. *In Press*) contains unique features not found in the Cape Igvak Management Plan (ADF&G 1992, McCullough and Campbell 1993). The Southeast District Mainland is open to set gillnet gear only through midnight July 10; after July 10 the fishery is open to both set gillnet and purse seine gear. ADF&G attempts to achieve a seven percent harvest of Chignik bound sockeye salmon in the Southeast District Mainland at midnight July 10 as well as a seven percent harvest at the conclusion of the management plan, July 25. Also unique to the SEDM are provisions for harvesting local chum salmon runs in the Stepovak Flats Section and local sockeye salmon in Orzinski Bay (Figure 8). A weir was installed at the outlet of Orzinski Lake in 1990 for the purpose of managing the fishery in proximity to the lake. In 1990, below desired sockeye escapement kept most of the Northwest Stepovak Section closed, while in 1991 escapements provided fishing time in excess to the balance of the SEDM. In 1992, only Orzinski Bay was managed by sockeye escapement counts into the lake; interim escapement goals were exceeded and Orzinski Bay was open for continuous salmon fishing from July 6 through August 2 (Tables 78-80).

In July 1992, in Superior Court of the State of Alaska the BOF post June salmon management plan for the South Alaska Peninsula (5 AAC 09.366) was dismissed by Superior Court Judge Hopwood and South Alaska Peninsula management returned to pre-1992 objectives, with a general South Peninsula commercial fishing period on July 13. Because of BOF action, court decisions, the weak Chignik second sockeye salmon run, and the June 30 to July 9 closure of the SEDM during the Chignik first and second runs overlap period there were no fishing periods in the SEDM from July 1 to July 12 that would have concentrated gear beyond normal expected gear levels (Shaul et al. 1993). The only abnormal concentration of gear occurred in Orzinski Bay where a larger than expected return of sockeye to Orzinski Lake occurred. The larger than expected return of sockeye to Orzinski Lake may have been due to cape fisheries in the Shumagin Islands being closed from July 1-13.

# Southeastern District Mainland 1993 Season Summary

The 1993 preseason forecast for the total harvest of Chignik bound sockeye salmon was 1,600,000 salmon for the first (Black Lake) run and 950,000 salmon for the second (Chignik Lake) run (Quimby and Owen *In press*). The forecast indicated that a fishery would occur in the SEDM targeting Chignik bound sockeye salmon because one of the conditions of the management plan, a harvest of at least 600,000 would occur in the Chignik Management Area was predicted to be met.

As of 11:00 am, June 10 the sockeye escapement in Chignik was about 49,000 salmon. The initial opening of the Chignik Management Area sockeye salmon fishery was established for June 12 for 24 hours. The initial opening of the Cape Igvak Section of the Kodiak Management Area was also on June 12 for 48 hours (Prokopowich et al. *In press*).

The first SEDM commercial salmon fishing period was for 24 hours, beginning at 9 am on June 12, except Orzinski Bay which remained closed because no sockeye salmon had passed through the weir (Tables 79 and 80; Appendix A). The first period catch (June 12-13) totaled 85 chinook, 7,514 sockeye, 0 coho, 1 pink, and 32 chum salmon for a total of 7,632 salmon from 58 set gillnet deliveries (Table 48). The SEDM interception of Chignik bound sockeye salmon was estimated at 6,011 salmon or about 15.2% of the total (Kodiak, Chignik, and Alaska Peninsula Management Areas) Chignik destined salmon harvest to date (Table 81). The Chignik fishers were on strike, and their catch was estimated from weir counts at Chignik River.

Through July 11 the SEDM had general fishing periods on June 12, 13, 15, 16, 17, 26, 27 and July 8 and 9, (prior to July 11 only set gillnet gear is allowed; Appendix A). During the period when only set gillnet gear is allowed the catch of Chignik bound sockeye salmon was 76,698 salmon (6.2% of the total Chignik bound harvest; Table 81). Other SEDM commercial salmon fishing periods were made for Stepovak Flats and Orzinski Bay, where fishing periods are established by local runs (McCullough and Campbell 1993). Orzinski Lake sockeye interim escapement goals were exceeded, and Orzinski Bay opened to commercial fishing from July: 3-12, 14-16, 20-24, and 26-28. The Stepovak Flats Section of the SEDM also has fishing periods established on the basis of local chum salmon runs through July 25. Sockeye harvested in the Stepovak Flats Section are apportioned as 80% Chignik destined and 20% other. The Stepovak Flats Section opened to commercial salmon fishing on June 12-13, 15-17, 26-27, and July 7-9, 14, and 26-27. Sockeye and chum catches in the Stepovak Flats Section were small, the sockeye catch totalled 4,906 of which 3,924 were determined as destined for Chignik.

Through July 25 the salmon harvest in the Southeastern District Mainland was 303,771 salmon, comprised of 1,093 chinook, 210,927 sockeye, 4,207 coho, 78,278 pink, and 9,266 chum salmon (Table 48). Through July 25, Orzinski Bay contributed 50,257 sockeye salmon to the SEDM fishery (Table 78). The total sockeye salmon catch through July 25 amounted to 210,927 salmon of which set gillnet gear harvested 88.5% and purse seine gear harvested 11.5% (Table 72; Figure 27). The total Chignik sockeye contribution to the SEDM through July 25 was 128,536 salmon of which set gillnet gear harvested 84.9% and purse seine gear harvested 15.1% (Table 71). SEDM fishers harvested 6.70% (128,536 salmon) of the Chignik destined sockeye harvest, Chignik fishers harvested 77.64% (1,488,557 salmon), and Cape Igvak fishers harvested 15.65% (300,055 salmon (Tables 73 and 74; Figure 26).

Portions of the SEDM had several fishing periods concurrent with portions of the South Peninsula through August 26. The last period for Stepovak Flats occurred on July 14, when chum run strength concerns caused the closure of the section for the remainder of the season (Appendix A). The SEDM closed to commercial salmon fishing after August 26 to achieve late run pink and chum escapements and early run coho escapements (Table 48).

The first post August (fall) fishery in the SEDM was from September 1-3. Catches were dominated by sockeye salmon with coho and chum salmon also being abundant (Table 48). Due to light effort the commercial fishing season was extended through October 30 with fishing periods being Monday through Friday.

October 6 was the last landing from the SEDM. During the fall fishery (September 1 - October 6) the catch was 18,100 salmon comprised of 28 chinook, 11,074 sockeye, 4,295 coho, 515 pink, and 2,188 chum salmon (Table 48). The SEDM season total harvest was 3,097,168 salmon comprised of 1,764 chinook, 331,015 sockeye, 37,034 coho, 2,661,360 pink, and 65,995 chum salmon. During 1993, Orzinski Bay contributed 52,776 sockeye salmon to the SEDM fishery (Table 78). The Orzinski River sockeye salmon escapement was an estimated 24,717 salmon (Table 79). The Orzinski River escapement added with the Orzinski Bay catch indicates the total Orzinski Lake run in 1993 was 77,493 sockeye salmon (Table 77).

Assuming the Chignik contribution is 80% of the sockeye salmon harvested in the SEDM except for those salmon caught in Orzinski Bay the total Chignik sockeye salmon contribution to the SEDM through the end of the season was estimated at 222,591 salmon (Table 82). Set gillnet gear and purse seine gear were estimated to have harvested 78.7% and 21.3%, respectively, of the Chignik sockeye salmon in the Southeast District Mainland (Tables 81 and 82). For all

sockeye salmon harvested in the SEDM (331,015 salmon) set gillnet gear harvested 82.1% and purse seine gear 17.9% (Table 76).

### Shumagin Islands 1993 Season Summary

As discussed in earlier sections of this report, the BOF July 1-20 closure of most of the South Peninsula was in effect during 1993 (ADF&G 1992: 5 AAC 09.366 Post June Salmon Management Plan for the Southern Alaska Peninsula). Fishing periods on July 7 and 14 for Zachary Bay (the only area in the Shumagin Islands open) resulted in a harvest of 2,692 salmon comprised of 178 pink and 5,762 chum salmon (Table 32). Accordingly, the first general post June period was July 20-22. As discussed in the 1993 Immature Salmon Concerns Section of this report, immature salmon did not affect commercial salmon fishing in the Shumagin Islands Section during 1993.

During July and August pink salmon dominated the harvest (Table 32). Commercial salmon fishing continued through August 26 when the Shumagin Islands Section was closed to achieve late run pink and chum salmon escapements and early run coho escapements.

The first post August (fall) fishery in the Shumagin Islands Section was during September 1-3. Catches were mostly sockeye and coho salmon. Due to light effort and relatively strong coho salmon catches for early September, the commercial fishing season was extended through October 30, with fishing periods being Mondays through Fridays. The last landing occurred on September 24.

The post June Shumagin Islands Section total salmon harvest was 3,780,508 salmon comprised of 2,578 chinook, 197,212 sockeye, 129,315 coho, 3,329,474 pink, and 121,929 chum salmon (Tables 64-66). The harvest of chinook, sockeye, coho, and chum salmon were all below the 1984-93 average harvest; the sockeye and coho catch was the smallest since 1985 while the chum harvest was the smallest since 1979. The 1993 post June pink salmon harvest was the second largest (3,329,474) since at least 1970, the harvest was second to the 1988 harvest. During the fall fishery (September 1-24) the Shumagin Islands harvest was 9,373 salmon comprised of 3 chinook, 5,146 sockeye, 3,535 coho, and 689 chum salmon (Table 32).

Post June annual CFEC permits in use and number of landings for both purse seine and set gillnet gear has increased in the Shumagin Islands Section since the early and mid-1970's. The 1984-93 average annual purse seine CFEC permits used was 71 for set gillnet gear and 48 for purse seine gear (Tables 65 and 66). The 1984-93 average annual number of landings by gear type was 691

for purse seine gear and 624 for set gillnet gear. The post June sockeye salmon catch by gear indicates an increasing harvest trend by set gillnet fishers with a corresponding decrease in the catch by purse seine fishers. Some of the increased sockeye salmon catch by gillnet fishers is the result of the Shumagin Islands being closed to purse seine gear during part of July 1989-92 due to the presence of immature salmon. Catch statistics also indicate an increasing catch of coho salmon by set gillnet fishers, but the 1984-93 average post June coho salmon catch is dominated by purse seine fishers that have averaged 93.5% of the coho salmon harvest.

### Southeastern District 1993 Season Summary

Post June catches of all species in the Southeastern District have increased since 1970 and averaged 2,775,391 salmon from 1970-93 and 4,491,119 salmon from 1984-93 (Tables 51-53). Most of the increased catch is a result of strong pink returns since 1977. The Southeastern District post June 1993 salmon harvest was 6,799,282 fish comprised of 4,022 (0.06%) chinook, 450,782 (6.63%) sockeye, 166,344 (2.45%) coho, 5,990,805 (88.11%) pink, and 187,329 (2.76%) chum salmon. During the fall fishery (September 1 - October 6) the Southeastern District harvest was 27,473 salmon comprised of 31 chinook, 16,220 sockeye, 7,830 coho, 515 pink, and 2,877 chum salmon.

In 1993, most salmon were harvested by purse seine fishers (90.3%; Tables 51-53). In the Southeastern District, not counting test fishing landings, set gillnet fishers accounted for 1,612 (65.5%) landings as compared to 849 (34.5%) purse seine landings.

The Southeastern District total estimated escapement was 26,373 sockeye, 1,128 coho, 1,499,563 pink, and 40,632 chum salmon (Table 7; coho data are incomplete). The 1993 estimated escapements approximate the 1986-92 average estimated escapements of 28,127 sockeye, 8,724 coho, 902,728 pink, and 156,437 chum salmon (Table 70). The estimated chum salmon escapement may be low due to a lack of late season aerial surveys. Chum salmon escapements were poor in the Stepovak Flats Section. Pink escapements were good throughout the district. Sockeye escapements were also good; Orzinski Lake exceeded escapement goals, while Acheredin Lakes' sockeye escapement of 1,500 salmon, although nearly double of last years escapement, was still well below the goal of 5,800 to 11,600 salmon (Table 7). Estimated ages of the catches by fishery and species will be presented in a separate report (Nelson *In Press*).

McGinty Point to Moss Cape 1993 Season Summary. Post June catches of all species in the McGinty Point to Moss Cape area (Figure 22) have increased substantially since 1975 and averaged 1,854,355 from 1974-93 and 2,156,036 salmon from 1984-93 (Tables 54-56). Most of

the increased catch is the result of strong pink salmon returns since 1975. The McGinty Point to Moss Cape post June 1993 salmon harvest was 2,510,363 fish comprised of 292 (0.01%) chinook, 108,341 (4.32%) sockeye, 13,089 (0.52%) coho, 2,159,042 (86.01%) pink, and 229,599 (9.15%) chum salmon. In 1993, only 54 set gillnet landings (11.0% of all landings) occurred in the area, as compared with 437 purse seine landings (98.90% of all landings).

The McGinty Point to Moss Cape (McGinty Point through Nikolaski Spit and Dolgoi Island streams) total estimated escapement was 11,250 sockeye, 1,833,412 pink, and 247,818 chum salmon, (Tables 7 and 70; coho data are incomplete). Pink escapements were strong throughout the area. Chum escapements were generally good. Estimated ages of the catches by fishery and species will be presented in a separate report (Nelson *In Press*).

Belkofski to Kenmore Head 1993 Season Summary. Post June catches of all species in the Belkofski to Kenmore Head area (Figure 22) have increased since 1977, but have consistently averaged more than one million salmon only since 1988 (Tables 57-59). The harvest in the Belkofski to Kenmore Head area has averaged 1,107,650 from 1974-93 and 1,485,571 salmon from 1984-93. The 1993 post June salmon harvest was 1,820,273 fish comprised of 108 (0.01%) chinook, 47,652 (2.62%) sockeye, 10,800 (0.59%) coho, 1,683,508 (92.49%) pink, and 78,205 (4.30%) chum salmon. In 1993, there were 120 set gillnet landings (28.10% of all landings) and 307 purse seine landings (71.90% of all landings).

The Belkofski to Kenmore Head (Belkofski Village Creek through Charlie Hansen's Creek streams) total estimated escapement was 77,864 sockeye, 15,480 coho, 1,031,163 pink, and 262,143 chum salmon, (coho data are incomplete, Table 7). Sockeye escapements were good and pink escapements were excellent throughout the area. Estimated ages of the catches by fishery and species will be presented in a separate report (Nelson *In Press*).

Kenmore Head to Scotch Cap 1993 Season Summary. Post June catches of all species in the Kenmore Head to Scotch Cap area (Figure 22) prior to 1993 had been increasing. The catch in this area averaged 171,002 from 1974-93 and averaged 287,746 from 1984-93 (Tables 60 and 61). The 1993 post June salmon harvest was the smallest harvest since 1981; the catch was 88,003 fish comprised of 119 (0.14%) chinook, 26,401 (30.00%) sockeye, 28,677 (32.59%) coho, 13,547 (15.39%) pink, and 19,259 (21.88%) chum salmon. In 1993, there was one purse seine landings (0.41% of all landings), 215 drift gillnet landings (88.84%), and 26 set gillnet landings (10.74%).

The Kenmore Head to Scotch Cap (Deadman's Cove Creek through Otter Cove Creeks; the Lazaref River and Sanak Island streams were not surveyed) total estimated escapement was 3,600 sockeye, 45,235 pink, and 2,653 chum salmon, (Table 7; coho data are incomplete). Estimated ages of the catches by fishery and species will be presented in a separate report (Nelson *In Press*).

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Table 1. Number of limited entry permits and fishing effort in the South Peninsula, 1987-93.

Purse Seine		Drift G	illnet	Set Gillnet		
Year	Permits Available	Permits Fished	Permits Available	Permits Fished	Permits Available	Permits Fished
1987	125	115	165	163	114	97
1988	125	114	165	162	114	98
1989	125	119	165	163	114	100
1990	126	121	164	161	114	94
1991	126	126	164	162	114	111
1992	125	119	164	159	114	107
1993	125	123	164	162	114	114

Note: Number of permits include permanent permits and interim use permits. Permits fished include those permit holders making at least one delivery during the year.

Table 2. Units of gear used in South Peninsula waters during June, 1987-93.<sup>a</sup>

Year		Drift Gillnet Permit Holders Fishing South Unimak and Shumagin Islands	Set Gillnet Permit Holders Fishing South Unimak and Shumagin Islands	Total
1983	100	146	35	282
1984	101	147	32	280
1985	107	150	48	305
1986	99	156	43	298
1987	86	144	60	290
1988	90	148	63	301
1989	99	145	61	305
1990	109	153	59	322
1991	112	157	65	335
1992	112	141	68	322
1993	116	140	72	328
1983-9	3 Average 102	149	53	304

Table 3. South Peninsula salmon harvest by species, in number of fish, by year, 1906-93.

1907	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1907			<del>-</del>				
1908	1906	0	0	0	0		0
1990	1907	0	0	0	0	0	0
1910	1908	0	69,400				69,400
1911   0	1909	0	108,400	7,200			115,600
1912	1910	0	46,300	5,500	0	_	51,800
1913         1,800         299,700         0         7,000         308,500           1915         4,800         367,900         16,200         120,100         333,100         842,10           1916         6,800         730,900         34,100         576,100         508,900         1,856,800           1918         8,700         1,014,100         16,300         2,150,000         1551,000         4,690,90           1918         8,700         1,014,100         16,300         2,150,000         1551,000         4,690,90           1920         7,800         619,100         56,100         80,200         321,400         1,686,80           1921         700         830,700         1,500         47,300         34,300         4,241,60           1921         700         830,700         1,500         47,300         349,300         4,491,90           1922         6,900         3,376,800         2,200         756,700         349,300         4,491,90           1924         3,900         1,352,000         127,100         382,100         1,116,800         2,457,20           1925         10,700         820,500         127,100         382,100         1,117,800         24,50,20							361,400
1914 600 628,900 0 311,000 221,100 1,171,500 1915 4,800 367,900 16,200 120,100 333,100 842,101 1916 6,800 730,900 34,100 576,100 508,900 1,856,800 1917 6,400 1,486,100 4,600 72,100 415,500 1,886,800 1918 8,700 1,014,100 16,300 2,150,000 1,501,000 4,690,900 1919 9,600 619,100 56,100 80,200 921,400 1,486,00 1920 7,800 1,142,300 47,700 2,109,800 334,000 4,241,600 1921 700 830,700 1,500 47,300 84,600 964,800 1922 6,900 3,376,800 2,200 756,700 349,300 4,491,900 1924 3,900 1,352,000 127,300 143,600 538,900 2,589,100 1925 10,700 820,500 127,300 138,2100 1,116,800 2,457,200 1925 10,700 820,500 127,100 382,100 1,116,800 2,457,200 1925 9,500 3,071,500 193,800 3,719,700 1,179,800 8,174,300 1928 7,700 971,500 193,800 3,719,700 1,179,800 8,174,300 1928 7,700 971,500 96,600 900,900 2,416,300 4,393,000 1929 10,500 935,800 84,500 1,793,500 2,429,000 5,253,300 1933a 10,900 935,200 161,100 6,094,800 1,278,100 8,480,101 931a 11,000 1,863,200 128,700 997,900 1,216,000 4,211,800 1933a 12,600 1,996,700 190,000 3,109,200 1,278,100 8,480,101 9313 12,600 1,996,700 190,000 3,109,200 1,713,900 6,482,400 1935a 12,600 1,996,700 190,000 3,109,200 1,173,900 6,482,400 1935a 13,900 978,400 117,200 5,386,200 2,003,100 8,498,800 1935a 13,900 978,400 117,200 5,386,200 2,003,100 8,498,800 1935a 13,900 978,400 117,200 5,386,200 2,003,100 8,498,800 1935a 14,400 3,662,600 284,600 9,471,000 2,310,900 15,743,500 1940a 9,000 1,558,000 73,900 9,302,000 1,556,000 924,500 7,721,00 183,000 7,529,100 184,200 7,169,100 1,476,600 9,644,900 1935a 13,900 1,040,300 184,200 7,169,100 1,476,600 9,644,900 1935a 14,400 3,662,600 284,600 9,471,000 2,310,900 15,743,500 1940a 9,000 31,000 1,558,000 73,000 9,000 90,000 1,506,700 12,449,900 9,100 1,400,300 184,200 7,182,800 2,326,300 10,472,700 1941a 13,000 1,072,000 183,000 5,347,000 1,556,000 944,900 9,538,600 238,700 96,600 4,360,200 944,500 9,538,400 1,558,000 339,200 1,683,700 1,319,900 4,735,100 1940a 1,200 4,800 1,317,100 55,800 23,100 0,400,300 10,472,700 1941a 1,200 5,386,000 339,200 1,683,700 1,319,600 3,149,600				•			596,800
1915         4,800         367,900         16,200         120,100         333,100         842,100           1916         6,800         730,900         34,100         576,100         508,900         1,856,80           1917         6,400         1,486,100         4,600         72,100         415,500         1,984,70           1918         8,700         1,014,100         16,300         2,150,000         1,501,000         4,690,90           1920         7,800         1,142,300         47,700         2,109,800         934,000         4,241,60           1921         700         830,700         1,500         47,300         84,600         964,80           1922         6,900         3,376,800         2,200         756,700         349,300         4,491,90           1923         4,100         1,827,200         75,300         143,600         538,900         2,589,10           1924         3,900         1352,000         127,100         382,100         1,116,800         2,457,20           1925         10,700         820,500         127,100         382,100         1,179,800         8,174,30           1927         9,600         714,700         125,300         1,455,550 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
1916         6,800         730,900         34,100         576,100         508,900         1,984,70           1917         6,400         1,486,100         4,600         72,100         415,500         1,984,70           1918         8,700         1,014,100         16,300         2,150,000         1,501,000         4,690,90           1919         9,600         619,100         56,100         80,200         921,400         1,686,400           1921         700         830,700         1,500         47,300         84,600         944,160           1921         700         830,700         1,500         47,300         84,600         944,800           1922         6,900         3,376,800         2,200         756,700         349,300         4,491,90           1923         4,100         1,827,200         75,300         143,600         538,900         2,589,10           1925         10,700         820,500         127,300         3,931,300         1,330,700         6,745,20           1926         9,500         3,071,500         193,800         3,719,700         1,179,800         8,174,30           1928*         7,500         935,800         84,500         1,299,700         3							
1917         6,400         1,486,100         4,600         72,100         415,500         1,984,70           1918         8,700         1,014,100         16,300         2,150,000         1,501,000         4,690,90           1919         9,600         619,100         56,100         80,200         921,400         1,686,40           1920         7,800         1,142,300         47,700         2,109,800         934,000         4,241,60           1921         700         830,700         1,500         47,300         84,600         964,80           1922         6,900         3,376,800         2,200         756,700         349,300         4,491,90           1923         4,100         1,827,200         75,300         143,600         538,900         2,589,10           1924         3,900         1,352,000         127,100         382,100         1,116,800         2,457,20           1925         10,700         820,500         127,100         382,100         1,116,800         2,457,20           1928*         7,700         971,500         93,800         3,719,700         1,174,30         3,719,700         1,174,30           1929**         10,500         935,800         84,500							
1918       8,700       1,014,100       16,300       2,150,000       1,501,000       4,690,90.         1920       7,800       1,142,300       47,700       2,109,800       931,400       1,686,40         1921       700       830,700       1,500       47,300       84,600       964,80         1922       6,900       3,376,800       2,200       756,700       349,300       4,91,90         1923       4,100       1,827,200       75,300       143,600       538,900       2,589,10         1924       3,900       1,352,000       127,300       3,931,300       1,330,700       6,745,20         1925       10,700       820,500       127,100       382,100       1,116,800       2,457,20         1926       9,500       3,071,500       193,800       3,719,700       1,179,800       8,174,30         1928*       7,700       971,500       96,600       900,900       2,416,300       4,393,00         1922**       10,500       935,800       84,500       1,793,500       2,429,000       5,253,30         1930**       10,900       315,200       16,100       6,094,800       1,278,100       8,480,100         1933**       12,600       1,37					•	·	
1919         9,600         619,100         56,100         80,200         921,400         1,686,40           1920         7,800         1,142,300         47,700         2,109,800         934,000         4,241,60           1922         6,900         3,376,800         2,200         756,700         349,300         4,491,90           1923         4,100         1,827,200         75,300         143,600         588,900         2,589,100           1924         3,900         1,352,000         127,300         3,931,300         1,330,700         6,745,20           1925         10,700         820,500         127,100         382,100         1,116,800         2,457,20           1926         9,500         3,071,500         193,800         3,719,700         1,179,800         8,174,30           1928*         7,700         971,500         935,800         1,455,500         1,299,700         3,604,80           1928*         7,700         935,800         84,500         1,793,500         2,429,000         5,253,300           1931*         11,000         1,863,200         161,100         6,094,800         1,278,100         8,480,100           1932*         17,400         2,977,300         112,300							•
1920         7,800         1,142,300         47,700         2,109,800         934,000         4,241,60           1921         700         830,700         1,500         47,300         84,600         964,80           1922         6,900         3,376,800         2,200         756,700         349,300         4,491,90           1923         4,100         1,827,200         75,300         143,600         538,900         2,589,10           1924         3,900         1,352,000         127,300         3,931,300         1,330,700         6,745,200           1925         10,700         820,500         127,100         382,100         1,116,800         2,457,20           1926         9,500         3,071,500         193,800         3,719,700         1,179,800         8,174,30           1928*         7,700         971,500         96,600         900,900         2,416,300         4,393,00           1929**         10,500         935,800         84,500         1,793,500         2,429,000         5,253,300           1931**         11,000         1,863,200         128,700         997,900         1,216,000         4,211,80           1932**         17,400         2,977,300         12,300							
1921       700       830,700       1,500       47,300       84,600       964,80         1922       6,900       3,376,800       2,200       756,700       349,300       4,491,90         1923       4,100       1,827,200       75,300       143,600       538,900       2,589,10         1924       3,900       1,352,000       127,300       3,931,300       1,330,700       6,745,20         1925       10,700       820,500       127,100       382,100       1,116,800       2,457,20         1926       9,500       3,071,500       193,800       3,719,700       1,179,800       8,174,30         1927       9,600       714,700       125,300       1,455,500       1,299,700       3,604,80         1928*       10,500       935,800       84,500       1,793,500       2,416,300       4,333,00         1930*       10,900       935,200       161,100       6,94,800       1,278,100       8,480,100         1931*       11,000       1,863,200       128,700       99,790       1,216,000       4,211,80         1932*       17,400       2,977,300       112,300       3,604,800       1,730,00       7,529,100         1933*       13,900							
1922         6,900         3,376,800         2,200         756,700         349,300         4,491,90           1923         4,100         1,827,200         75,300         143,600         538,900         2,589,10           1924         3,900         1,352,000         127,300         3,931,300         1,330,700         6,745,20           1925         10,700         820,500         127,100         382,100         1,116,800         2,457,20           1926         9,500         3,071,500         193,800         3,719,700         1,179,800         8,174,300           1927         9,600         714,700         125,300         1,455,500         1,299,700         3,604,80           1929*         10,500         935,800         84,500         1,793,500         2,429,000         5,253,300           1930*         10,900         935,200         161,100         6,094,800         1,278,100         8,480,100           1931*         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1932*         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1933*         12,600         1,996,700         1							
1923         4,100         1,827,200         75,300         143,600         538,900         2,588,100           1924         3,900         1,352,000         127,300         3,931,300         1,316,800         6,745,20           1925         10,700         820,500         127,100         382,100         1,116,800         2,457,20           1926         9,500         3,071,500         193,800         3,719,700         1,179,800         8,174,30           1927         9,600         714,700         125,300         1,455,500         1,299,700         3,604,80           1928*         7,700         971,500         96,600         900,900         2,416,300         4,393,000           1929*         10,500         935,800         84,500         1,793,500         2,429,000         5,253,300           1930*         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1933*         12,600         1,979,700         190,000         3,604,800         817,300         7,529,100           1933*         12,600         1,974,000         247,100         6,538,500         1,173,900         6,482,400           1934*         17,600         1,372,400			•				
1924         3,900         1,352,000         127,300         3,931,300         1,330,700         6,745,20           1925         10,700         820,500         127,100         382,100         1,116,800         2,457,20           1926         9,500         3,071,500         193,800         3,719,700         1,179,800         8,174,30           1928*         7,700         971,500         96,600         900,900         2,416,300         4,393,00           1928*         7,700         935,800         84,500         1,793,500         2,429,000         5,253,30           1930*         10,900         935,200         161,100         6,094,800         1,278,100         8,480,100           1931*         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1932*         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1933*         12,600         1,996,700         190,000         3,109,200         1,173,900         6,482,400           1934*         17,600         1,372,400         247,100         6,538,500         1,940,300         15,743,500           1935*         13,900         978,400						·	
1925         10,700         820,500         127,100         382,100         1,116,800         2,457,20           1926         9,500         3,071,500         193,800         3,717,700         1,179,800         8,174,30           1927         9,600         714,700         1,455,500         1,299,700         3,604,800           1928*         7,700         971,500         96,600         900,900         2,416,300         4,393,000           1930*         10,500         935,800         84,500         1,793,500         2,429,000         5,253,300           1931*         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1932*         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1934*         17,600         1,996,700         190,000         3,109,200         1,173,900         6,482,400           1934*         17,600         1,372,400         247,100         6,538,500         1,940,300         10,115,900           1935*         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1937*         9,300         1,558,000         73,900							
1926         9,500         3,071,500         193,800         3,719,700         1,179,800         8,174,30           1927         9,600         714,700         125,300         1,455,500         1,299,700         3,604,80           1928*         7,700         971,500         96,600         900,900         2,416,300         4,393,000           1930*         10,500         935,800         84,500         1,793,500         2,429,000         5,253,300           1931*         11,000         1,863,200         128,700         997,900         1,278,100         8,480,100           1932*         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1933*         12,600         1,996,700         190,000         3,109,200         1,173,900         6,482,400           1934*         17,600         1,372,400         247,100         6,538,500         1,940,300         10,115,900           1935*         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1937*         9,300         1,558,000         73,900         9,302,000         1,506,700         12,449,900           1938*         6,400         772,100 <td></td> <td></td> <td></td> <td></td> <td>· ·</td> <td>•</td> <td></td>					· ·	•	
1927         9,600         714,700         125,300         1,455,500         1,299,700         3,604,80           1928**         7,700         971,500         96,600         900,900         2,416,300         4,393,000           1929**         10,500         935,800         84,500         1,793,500         2,429,000         5,253,300           1930**         10,900         935,200         161,100         6,094,800         1,278,100         8,480,100           1931**         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1933**         12,600         1,996,700         190,000         3,109,200         1,173,900         6,482,400           1934**         17,600         1,372,400         247,100         6,538,500         1,940,300         10,115,900           1935**         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1936**         14,400         3,662,600         284,600         9,471,000         2,310,900         15,743,500           1933**         16,500         1,881,700         98,900         6,005,300         1,476,600         9,644,900           1939**         16,500		•					•
1928a         7,700         971,500         96,600         900,900         2,416,300         4,393,000           1929a         10,500         935,800         84,500         1,793,500         2,429,000         5,253,300           1931a         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1932a         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1933a         12,600         1,996,700         190,000         3,109,200         1,739,900         6,482,400           1934a         17,600         1,372,400         247,100         6,538,500         1,940,300         10,115,900           1935a         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1937a         13,900         978,400         117,200         5,386,200         2,003,100         15,743,500           1937a         9,300         1,558,000         73,900         9,302,000         1,506,700         12,449,900           1939a         16,500         1,881,700         98,900         6,005,300         1,440,600         9,644,900           1940a         9,100         1,04							
1929a         10,500         935,800         84,500         1,793,500         2,429,000         5,253,300           1930a         10,900         935,200         161,100         6,094,800         1,278,100         8,480,100           1931a         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1932a         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1934a         17,600         1,996,700         190,000         3,109,200         1,173,900         6,482,400           1935a         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1935a         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1936a         14,400         3,662,600         284,600         9,471,000         2,310,900         15,743,500           1937a         9,300         1,558,000         73,900         9,302,000         1,566,700         12,449,900           1939a         16,500         1,881,700         98,900         6,005,300         1,440,600         9,644,900           1940a         9,100         1							
1930a         10,900         935,200         161,100         6,094,800         1,278,100         8,480,100           1931a         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1932a         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1933a         12,600         1,996,700         190,000         3,109,200         1,173,900         6,482,400           1934a         17,600         1,372,400         247,100         6,538,500         1,940,300         10,115,900           1935a         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1936a         14,400         3,662,600         284,600         9,471,000         2,310,900         15,743,500           1937a         9,300         1,558,000         73,900         9,302,000         1,566,700         12,449,900           1938a         6,400         772,100         220,700         7,169,100         1,476,600         9,644,900           1930a         1,658,700         1,881,700         98,900         6,005,300         1,440,600         9,443,000           1940a         9,100					·		
1931a         11,000         1,863,200         128,700         997,900         1,216,000         4,211,800           1932a         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1934a         17,600         1,996,700         190,000         3,109,200         1,173,900         6,482,400           1935a         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1936a         14,400         3,662,600         284,600         9,471,000         2,310,900         15,743,500           1937a         9,300         1,558,000         73,900         9,302,000         1,476,600         9,644,900           1939a         16,500         1,881,700         98,900         6,005,300         1,440,600         9,443,000           1940a         9,100         1,040,300         184,200         7,182,800         2,326,300         10,472,700           1941a         13,000         1,072,000         183,000         5,347,000         1,542,000         8,157,800           1943a         21,700         2,397,700         90,600         4,360,200         924,500         7,794,700           1944a         9,900 <t< td=""><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td></t<>		•					
1932a         17,400         2,977,300         112,300         3,604,800         817,300         7,529,100           1933a         12,600         1,996,700         190,000         3,109,200         1,173,900         6,482,400           1935a         13,900         978,400         117,200         5,386,200         2,003,100         8,498,800           1936a         14,400         3,662,600         284,600         9,471,000         2,310,900         15,743,500           1937a         9,300         1,558,000         73,900         9,302,000         1,506,700         12,449,900           1938a         6,400         772,100         220,700         7,169,100         1,476,600         9,443,900           1939a         16,500         1,881,700         98,900         6,005,300         1,440,600         9,443,900           1940a         9,100         1,040,300         184,200         7,182,800         2,326,300         10,472,700           1941a         13,000         1,072,000         183,000         5,347,000         1,542,000         8,157,800           1942a         4,800         810,100         123,000         6,762,600         1,321,100         9024,500         7,794,700           1944a							
1933a       12,600       1,996,700       190,000       3,109,200       1,173,900       6,482,400         1934a       17,600       1,372,400       247,100       6,538,500       1,940,300       10,115,900         1935a       13,900       978,400       117,200       5,386,200       2,003,100       8,498,800         1937a       14,400       3,662,600       284,600       9,471,000       2,310,900       15,743,500         1937a       9,300       1,558,000       73,900       9,302,000       1,506,700       12,449,900         1938a       6,400       772,100       220,700       7,169,100       1,476,600       9,644,900         1940a       9,100       1,040,300       184,200       7,182,800       2,326,300       10,472,700         1941a       13,000       1,072,000       183,000       5,347,000       1,542,000       8,157,800         1942a       4,800       810,100       123,000       6,762,600       1,321,100       9,021,600         1943a       21,700       2,397,700       90,600       4,360,200       924,500       7,794,700         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600	_				·		
1934a       17,600       1,372,400       247,100       6,538,500       1,940,300       10,115,900         1935a       13,900       978,400       117,200       5,386,200       2,003,100       8,498,800         1936a       14,400       3,662,600       284,600       9,471,000       2,310,900       15,743,500         1937a       9,300       1,558,000       73,900       9,302,000       1,506,700       12,449,900         1939a       16,500       1,881,700       98,900       6,005,300       1,440,600       9,443,000         1941a       13,000       1,040,300       184,200       7,182,800       2,326,300       10,472,700         1941a       13,000       1,072,000       183,000       5,347,000       1,542,000       8,157,800         1942a       4,800       810,100       123,000       6,762,600       1,321,100       9,021,600         1943a       21,700       2,397,700       90,600       4,360,200       924,500       7,794,700         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1945a       21,400       813,400       151,400       1,964,000       1,219,200       4,735,100	_						
1935a       13,900       978,400       117,200       5,386,200       2,003,100       8,498,800         1936a       14,400       3,662,600       284,600       9,471,000       2,310,900       15,743,500         1937a       9,300       1,558,000       73,900       9,302,000       1,506,700       12,449,900         1938a       6,400       772,100       220,700       7,169,100       1,476,600       9,644,900         1940a       9,100       1,040,300       184,200       7,182,800       2,326,300       10,472,700         1941a       13,000       1,072,000       183,000       5,347,000       1,542,000       8,157,800         1942a       4,800       810,100       123,000       6,762,600       1,321,100       9,021,600         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1944a       9,900       538,600       238,700       2,653,800       948,900       5,539,400         1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1949	1934ª	17,600					10,115,900
1936a       14,400       3,662,600       284,600       9,471,000       2,310,900       15,743,500         1937a       9,300       1,558,000       73,900       9,302,000       1,506,700       12,449,900         1938a       6,400       772,100       220,700       7,169,100       1,476,600       9,644,900         1939a       16,500       1,881,700       98,900       6,005,300       1,440,600       9,443,000         1940a       9,100       1,040,300       184,200       7,182,800       2,326,300       10,472,700         1941a       13,000       1,072,000       183,000       5,347,000       1,542,000       8,157,800         1942a       4,800       810,100       123,000       6,762,600       1,321,100       9,021,600         1943a       21,700       2,397,700       90,600       4,360,200       924,500       7,794,700         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1	1935ª					2,003,100	8,498,800
1938a       6,400       772,100       220,700       7,169,100       1,476,600       9,644,900         1939a       16,500       1,881,700       98,900       6,005,300       1,440,600       9,443,000         1940a       9,100       1,040,300       184,200       7,182,800       2,326,300       10,472,700         1941a       13,000       1,072,000       183,000       5,347,000       1,542,000       8,157,800         1942a       4,800       810,100       123,000       6,762,600       1,321,100       9,021,600         1943a       21,700       2,397,700       90,600       4,360,200       924,500       7,794,700         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1946a       6,100       752,300       151,400       1,964,000       1,219,900       4,093,700         1947a       3,400       1,137,100       55,800       2,319,600       1,139,600       3,149,600         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1950a <td>1936ª</td> <td>14,400</td> <td></td> <td>284,600</td> <td>9,471,000</td> <td>2,310,900</td> <td>15,743,500</td>	1936ª	14,400		284,600	9,471,000	2,310,900	15,743,500
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1937ª	9,300	1,558,000	73,900	9,302,000	1,506,700	12,449,900
1940a       9,100       1,040,300       184,200       7,182,800       2,326,300       10,472,700         1941a       13,000       1,072,000       183,000       5,347,000       1,542,000       8,157,800         1942a       4,800       810,100       123,000       6,762,600       1,321,100       9,021,600         1943a       21,700       2,397,700       90,600       4,360,200       924,500       7,794,700         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1946a       6,100       752,300       151,400       1,964,000       1,219,900       4,093,700         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952	1938ª	6,400	772,100	220,700	7,169,100	1,476,600	9,644,900
1941a       13,000       1,072,000       183,000       5,347,000       1,542,000       8,157,800         1942a       4,800       810,100       123,000       6,762,600       1,321,100       9,021,600         1943a       21,700       2,397,700       90,600       4,360,200       924,500       7,794,700         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1946a       6,100       752,300       151,400       1,964,000       1,219,200       4,093,700         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,	1939ª	16,500	1,881,700	98,900	6,005,300	1,440,600	9,443,000
1942a       4,800       810,100       123,000       6,762,600       1,321,100       9,021,600         1943a       21,700       2,397,700       90,600       4,360,200       924,500       7,794,700         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1946a       6,100       752,300       151,400       1,964,000       1,219,900       4,093,700         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200	_	•	·	•			10,472,700
1943a       21,700       2,397,700       90,600       4,360,200       924,500       7,794,700         1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1946a       6,100       752,300       151,400       1,964,000       1,219,900       4,093,700         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200       1,039,200       47,900       2,743,900       1,464,600       5,302,80         1955       5,400	_	•					• •
1944a       9,900       538,600       238,700       2,653,800       985,600       4,426,600         1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1946a       6,100       752,300       151,400       1,964,000       1,219,900       4,093,700         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200       1,039,200       47,900       2,743,900       1,464,600       5,302,80         1954       4,200       636,300       49,400       2,033,300       1,413,400       4,136,60         1955       5,400	_						
1945a       21,400       813,400       116,100       3,639,600       948,900       5,539,400         1946a       6,100       752,300       151,400       1,964,000       1,219,900       4,093,700         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200       1,039,200       47,900       2,743,900       1,464,600       5,302,80         1954       4,200       636,300       49,400       2,033,300       1,413,400       4,136,60         1955       5,400       550,100       44,800       2,529,200       688,200       3,817,70         1956       4,800		•					
1946a       6,100       752,300       151,400       1,964,000       1,219,900       4,093,700         1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200       1,039,200       47,900       2,743,900       1,464,600       5,302,80         1954       4,200       636,300       49,400       2,033,300       1,413,400       4,136,60         1955       5,400       550,100       44,800       2,529,200       688,200       3,817,70         1956       4,800       641,400       61,900       2,740,700       1,618,700       5,067,50         1957       5,800 <t< td=""><td>_</td><td></td><td>•</td><td>-</td><td>, ,</td><td>•</td><td></td></t<>	_		•	-	, ,	•	
1947a       3,400       1,137,100       55,800       2,319,600       1,219,200       4,735,100         1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200       1,039,200       47,900       2,743,900       1,464,600       5,302,80         1954       4,200       636,300       49,400       2,033,300       1,413,400       4,136,60         1955       5,400       550,100       44,800       2,529,200       688,200       3,817,70         1956       4,800       641,400       61,900       2,740,700       1,618,700       5,067,50         1957       5,800       341,900       49,900       913,100       1,281,400       2,592,10		•					
1948a       1,200       285,900       39,200       1,683,700       1,139,600       3,149,600         1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200       1,039,200       47,900       2,743,900       1,464,600       5,302,80         1954       4,200       636,300       49,400       2,033,300       1,413,400       4,136,60         1955       5,400       550,100       44,800       2,529,200       688,200       3,817,70         1956       4,800       641,400       61,900       2,740,700       1,618,700       5,067,50         1957       5,800       341,900       49,900       913,100       1,281,400       2,592,10					· ·		
1949a       3,800       637,500       19,500       1,544,000       560,900       2,765,700         1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200       1,039,200       47,900       2,743,900       1,464,600       5,302,80         1954       4,200       636,300       49,400       2,033,300       1,413,400       4,136,60         1955       5,400       550,100       44,800       2,529,200       688,200       3,817,70         1956       4,800       641,400       61,900       2,740,700       1,618,700       5,067,50         1957       5,800       341,900       49,900       913,100       1,281,400       2,592,10		•					
1950a       4,000       1,745,300       70,700       1,613,700       562,500       3,996,200         1951       1,500       264,200       55,700       2,844,800       683,100       3,849,30         1952       9,200       894,500       39,200       908,500       1,040,800       2,892,20         1953       7,200       1,039,200       47,900       2,743,900       1,464,600       5,302,80         1954       4,200       636,300       49,400       2,033,300       1,413,400       4,136,60         1955       5,400       550,100       44,800       2,529,200       688,200       3,817,70         1956       4,800       641,400       61,900       2,740,700       1,618,700       5,067,50         1957       5,800       341,900       49,900       913,100       1,281,400       2,592,10							
1951     1,500     264,200     55,700     2,844,800     683,100     3,849,30       1952     9,200     894,500     39,200     908,500     1,040,800     2,892,20       1953     7,200     1,039,200     47,900     2,743,900     1,464,600     5,302,80       1954     4,200     636,300     49,400     2,033,300     1,413,400     4,136,60       1955     5,400     550,100     44,800     2,529,200     688,200     3,817,70       1956     4,800     641,400     61,900     2,740,700     1,618,700     5,067,50       1957     5,800     341,900     49,900     913,100     1,281,400     2,592,10							
1952     9,200     894,500     39,200     908,500     1,040,800     2,892,20       1953     7,200     1,039,200     47,900     2,743,900     1,464,600     5,302,80       1954     4,200     636,300     49,400     2,033,300     1,413,400     4,136,60       1955     5,400     550,100     44,800     2,529,200     688,200     3,817,70       1956     4,800     641,400     61,900     2,740,700     1,618,700     5,067,50       1957     5,800     341,900     49,900     913,100     1,281,400     2,592,10							
1953     7,200     1,039,200     47,900     2,743,900     1,464,600     5,302,80       1954     4,200     636,300     49,400     2,033,300     1,413,400     4,136,60       1955     5,400     550,100     44,800     2,529,200     688,200     3,817,70       1956     4,800     641,400     61,900     2,740,700     1,618,700     5,067,50       1957     5,800     341,900     49,900     913,100     1,281,400     2,592,10							
1954     4,200     636,300     49,400     2,033,300     1,413,400     4,136,60       1955     5,400     550,100     44,800     2,529,200     688,200     3,817,70       1956     4,800     641,400     61,900     2,740,700     1,618,700     5,067,50       1957     5,800     341,900     49,900     913,100     1,281,400     2,592,10							
1955     5,400     550,100     44,800     2,529,200     688,200     3,817,70       1956     4,800     641,400     61,900     2,740,700     1,618,700     5,067,50       1957     5,800     341,900     49,900     913,100     1,281,400     2,592,10							
1956     4,800     641,400     61,900     2,740,700     1,618,700     5,067,50       1957     5,800     341,900     49,900     913,100     1,281,400     2,592,10							
1957 5,800 341,900 49,900 913,100 1,281,400 2,592,10							
				•			
1958 800 186,100 70,600 1,385,200 841,000 2,483,70	1958	800	186,100	70,600	1,385,200	841,000	2,483,700

Table 3. (page 2 of 2)

1959 900 217,500 8,500 915,600 711,700 1,854,2 1960 1,700 379,000 1,800 1,197,500 904,400 2,484,41 1961 900 456,800 10,400 1,727,800 748,600 2,944,51 1962 3,300 420,000 12,500 1,965,500 824,800 3,226,11 1963 1,900 204,400 16,500 2,367,700 461,300 3,051,81 1964 2,000 370,800 13,600 2,740,400 751,000 3,877,81 1965 2,100 915,700 34,200 2,884,100 556,400 4,392,51 1966 1,400 606,200 6,300 302,300 494,400 1,410,61 1967 1,600 294,100 2,900 77,800 245,200 621,61 1968 1,400 699,800 31,100 1,287,100 325,300 2,344,71 1970 1,806 1,779,525 32,571 1,737,985 993,349 4,545,22 1971 2,174 716,087 16,907 1,445,031 1,365,957 3,546,11 1972 1,332 557,422 8,021 78,221 731,814 1,376,81 1973 415 330,091 6,599 58,051 292,943 688,01 1974 581 197,153 9,366 100,601 71,826 379,55 1975 117 243,548 67 60,642 130,750 435,11 1979 1,559 311,722 2,108 1,448,648 243,167 2,006,22 1979 73 579,411 60,774 5,590,145 546,182 6,777,21 1979 73 579,411 60,774 5,590,145 546,182 6,777,21 1979 73 579,411 60,774 5,590,145 546,182 6,777,21 1979 73 579,411 60,774 5,590,145 546,842 6,777,21 1979 73 579,411 60,774 5,590,145 546,842 6,777,21 1979 73 579,411 60,774 5,590,145 546,842 6,777,21 1979 74,741 74,7							
1960 1,700 379,000 1,800 1,197,500 904,400 2,484,41 1961 900 456,800 10,400 1,727,800 748,600 2,944,51 1962 3,300 420,000 12,500 1,965,500 824,800 3,226,11 1963 1,900 204,400 16,500 2,367,700 461,300 3,051,81 1964 2,000 915,700 34,200 2,884,100 556,400 4,392,51 1966 1,400 606,200 6,300 302,300 494,400 1,410,61 1967 1,600 294,100 2,900 77,800 245,200 621,61 1968 1,400 699,800 31,100 1,287,100 325,300 2,344,71 1969 1,900 912,800 10,900 1,219,400 389,200 2,534,21 1970 1,806 1,779,525 32,571 1,737,985 993,349 4,545,21 1971 2,174 716,087 16,907 1,445,031 1,365,957 3,546,11 1972 1,332 557,422 8,021 78,221 731,814 1,376,81 1973 415 330,091 6,599 58,051 292,943 688,01 1974 581 197,153 9,366 100,601 71,826 379,51 1975 2,174 7243,548 67 60,642 130,750 435,11 1976 2,196 375,027 216 2,366,833 532,503 3,276,77 1977 559 311,722 2,108 1,448,648 243,167 2,006,21 1978 773 579,411 60,774 5,590,145 546,182 6,777,21 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,77 1980 4,794 3,613,025 274,181 7,861,470 1,353,112 13,106,51 1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,41 1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,27 1983 26,571 2,556,557 127,657 2,827,622 1,704,072 7,242,47 1986 5,589 1,223,3089 235,854 4,031,487 1,749,651 7,245,67 1987 9,174 1,449,753 225,120 1,589,258 1,654,622 15,882,055 1985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,33 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,51 1999 7,065 2,660,800 443,843 7,292,658 9,942,31 11,398,55 1999 7,065 2,660,800 43,843 7,292,658 9,942,31 11,398,55 1999 7,065 2,660,800 43,843 7,292,658 9,942,31 11,398,55 1999 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,889,551 1991 7,975 2,319,942 317,129 10,616,756 1,588,755 14,889,551 1999 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,755 14,889,999 1991 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,999	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1961 900 456,800 10,400 1,727,800 748,600 2,944,5 1962 3,300 420,000 12,500 1,965,500 824,800 3,226,1 1963 1,900 204,400 16,500 2,367,700 461,300 3,051,8 1964 2,000 370,800 13,600 2,740,400 751,000 3,877,8 1965 2,100 915,700 34,200 2,884,100 556,400 4,392,5 1966 1,400 606,200 6,300 302,300 494,400 1,410,6 1967 1,600 294,100 2,900 77,800 245,200 621,6 1968 1,400 699,800 31,100 1,287,100 325,300 2,344,70 1969 1,900 912,800 10,900 1,219,400 389,200 2,534,21 1970 1,806 1,779,525 32,571 1,737,985 993,349 4,545,2 1971 2,174 716,087 16,907 1,445,031 1,365,957 3,546,11 1971 2,134 557,422 8,021 78,221 731,814 1,376,81 1973 415 330,091 6,599 58,051 292,943 688,01 1974 581 197,153 9,366 100,601 71,826 379,51 1975 117 243,548 67 60,642 130,750 435,11 1976 2,196 375,027 216 2,366,833 532,503 3,276,71 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,71 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,71 1980 4,794 3,613,025 274,181 7,861,470 1,353,112 13,106,51 1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,42 1982 9,845 2,345,981 256,046 6,734,905 2,722,495 11,619,22 1984 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,05 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,41 1989 1,075 1,473,651 505,533 7,044,824 1,908,507 10,943,51 1989 1,075 2,319,942 317,129 10,616,756 1,588,795 14,859,51 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,91  Average 1983-92  10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83	1959	900	217,500	8,500	915,600	711,700	1,854,200
1962	1960	1,700	379,000	1,800	1,197,500	904,400	2,484,400
1963	1961		456,800	10,400	1,727,800	748,600	2,944,500
1964	1962		420,000	12,500	1,965,500	824,800	3,226,100
1965	1963	•		16,500	2,367,700	461,300	3,051,800
1966 1,400 606,200 6,300 302,300 494,400 1,410,61 1967 1,600 294,100 2,900 77,800 245,200 621,61 1968 1,400 699,800 31,100 1,287,100 325,300 2,344,71 1969 1,900 912,800 10,900 1,219,400 389,200 2,534,21 1970 1,806 1,779,525 32,571 1,737,885 993,349 4,545,22 1971 2,174 716,087 16,907 1,445,031 1,365,957 3,546,11 1972 1,332 557,422 8,021 78,221 731,814 1,376,81 1973 415 330,091 6,599 58,051 292,943 688,01 1974 581 197,153 9,366 100,601 71,826 379,51 1976 2,196 375,027 216 2,366,833 532,503 3,276,71 1977 559 311,722 2,108 1,448,648 243,167 2,006,71 1978 773 579,411 60,774 5,590,145 546,182 6,777,21 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,77 1980 4,794 3,613,025 274,181 7,861,470 1,353,112 13,106,51 1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,44 1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,22 1983 26,571 2,556,557 127,657 2,827,622 1,704,072 7,242,47 1988 6,589 1,223,089 235,854 4,031,487 1,749,651 7,245,65 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,51 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,52 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,959,24 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,859,91 140,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83	1964	2,000	370,800	13,600	2,740,400	751,000	3,877,800
1967 1,600 294,100 2,900 77,800 245,200 621,60 1968 1,400 699,800 31,100 1,287,100 325,300 2,344,70 1969 1,900 912,800 10,900 1,219,400 389,200 2,534,20 1970 1,806 1,779,525 32,571 1,737,985 993,349 4,545,22 1971 2,174 716,087 16,907 1,445,031 1,365,957 3,546,10 1972 1,332 557,422 8,021 78,221 731,814 1,376,81 1973 415 330,091 6,599 58,051 292,943 688,00 1974 581 197,153 9,366 100,601 71,826 379,55 1975 117 243,548 67 60,642 130,750 435,11 1976 2,196 375,027 216 2,366,833 532,503 3,276,77 1977 559 311,722 2,108 1,448,648 243,167 2,006,20 1978 773 579,411 60,774 5,590,145 546,182 6,777,21 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,77 1980 4,794 3,613,025 274,181 7,861,470 1,353,112 13,106,55 1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,41 1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,22 1983 26,571 2,5556,557 127,567 2,827,622 1,704,072 7,242,44 1984 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,05 1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,242,66 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,49 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,51 1999 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,55 14992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,22 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,85  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,85  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,85	1965	•		34,200	2,884,100	556,400	4,392,500
1968	1966	1,400	606,200	6,300	302,300	494,400	1,410,600
1969 1,900 912,800 10,900 1,219,400 389,200 2,534,20 1970 1,806 1,779,525 32,571 1,737,985 993,349 4,545,22 1971 2,174 716,087 16,907 1,445,031 1,365,957 3,546,11 1972 1,332 557,422 8,021 78,221 731,814 1,376,81 1973 415 330,091 6,599 58,051 292,943 688,01 1974 581 197,153 9,366 100,601 71,826 379,551 1975 117 243,548 67 60,642 130,750 435,12 1976 2,196 375,027 216 2,366,833 532,503 3,276,77 1977 559 311,722 2,108 1,448,648 243,167 2,006,21 1978 773 579,411 60,774 5,590,145 546,182 6,777,24 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,77 1980 4,794 3,613,025 274,181 7,861,470 1,353,112 13,106,561 1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,42 1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,22 1983 26,571 2,556,557 127,657 2,827,622 1,704,072 7,242,47 1984 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,05 1985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,31 1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,67 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,49 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,55 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,55 1999 7,065 2,660,800 443,843 7,292,658 994,231 11,398,55 1999 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,55 1999 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,55 1999 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1999 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83	1967	1,600	•	2,900	77,800	245,200	621,600
1970	1968				1,287,100	325,300	2,344,700
1971		1,900	912,800		1,219,400		2,534,200
1972	1970	•			1,737,985	993,349	4,545,236
1973		2,174		16,907	•	1,365,957	3,546,156
1974 581 197,153 9,366 100,601 71,826 379,55 1975 117 243,548 67 60,642 130,750 435,15 1976 2,196 375,027 216 2,366,833 532,503 3,276,75 1977 559 311,722 2,108 1,448,648 243,167 2,006,26 1978 773 579,411 60,774 5,590,145 546,182 6,777,28 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,75 1980 4,794 3,613,025 274,181 7,861,470 1,353,112 13,106,565 1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,45 1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,27 1983 26,571 2,556,557 127,657 2,827,622 1,704,072 7,242,47 1984 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,05 1985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,33 1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,67 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,47 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,53 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,267 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,53 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,267 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,93  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92				-	78,221	731,814	1,376,810
1975						292,943	688,099
1976			197,153	9,366	100,601	71,826	379,527
1977 559 311,722 2,108 1,448,648 243,167 2,006,26 1978 773 579,411 60,774 5,590,145 546,182 6,777,26 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,77 1980 4,794 3,613,025 274,181 7,861,470 1,353,112 13,106,56 1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,42 1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,27 1983 26,571 2,556,557 127,657 2,827,622 1,704,072 7,242,47 1984 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,05 1985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,33 1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,67 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,49 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,59 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,55 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,59 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92							435,124
1978 773 579,411 60,774 5,590,145 546,182 6,777,28 1979 2,141 1,149,927 356,867 6,564,914 482,930 8,556,77 1980 4,794 3,613,025 274,181 7,861,470 1,353,112 13,106,58 1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,42 1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,27 1983 26,571 2,556,557 127,657 2,827,622 1,704,072 7,242,47 1984b 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,05 1985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,33 1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,67 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,49 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,53 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,53 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,59 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92					2,366,833	532,503	3,276,775
1979							2,006,204
1980							6,777,285
1981 11,182 2,241,513 162,223 5,033,028 1,768,475 9,216,42 1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,22 1983 26,571 2,556,557 127,657 2,827,622 1,704,072 7,242,42 1984b 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,052 1985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,32 1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,62 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,43 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,532 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,532 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,262 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,532 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,932  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,833						·	8,556,779
1982 9,845 2,345,981 256,046 6,734,905 2,272,495 11,619,21983 26,571 2,556,557 127,657 2,827,622 1,704,072 7,242,41984b 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,051985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,311986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,611987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,491988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,5911989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,5911990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,2611991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,5911992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,2611993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,991		•		•			13,106,582
1983							9,216,421
1984 <sup>b</sup> 9,198 2,318,028 310,950 11,589,258 1,654,622 15,882,05 1985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,33 1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,63 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,49 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,59 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,59 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,269 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,59 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,269 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92							11,619,272
1985 6,642 2,144,416 172,514 4,431,016 1,348,726 8,103,33 1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,63 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,49 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,53 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,53 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,53 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,93  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92							7,242,479
1986 5,589 1,223,089 235,854 4,031,487 1,749,651 7,245,67 1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,49 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,59 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,59 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,269 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,59 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,269 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,839  Average 1973-92		•				1,654,622	15,882,056
1987 9,174 1,449,753 225,120 1,208,556 1,376,887 4,268,49 1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,59 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,59 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,269 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,59 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,269 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,839  Average 1973-92						1,348,726	8,103,314
1988 11,075 1,473,651 505,533 7,044,824 1,908,507 10,943,53 1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,53 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,53 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,93  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92				235,854		1,749,651	7,245,670
1989 7,065 2,660,800 443,843 7,292,658 994,231 11,398,59 1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,59 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92		•		•	1,208,556		4,268,490
1990 16,522 2,386,844 307,218 2,865,856 1,237,826 6,814,26 1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,59 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92	1988			505,533	7,044,824	1,908,507	10,943,590
1991 7,975 2,319,942 317,129 10,616,756 1,588,795 14,850,59 1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92			2,660,800		7,292,658	994,231	11,398,597
1992 8,026 3,445,914 418,232 9,770,386 1,316,709 14,959,26 1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,95  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92	1990			307,218	2,865,856	1,237,826	6,814,266
1993 14,413 3,689,074 220,148 9,928,107 1,048,257 14,899,99  Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83  Average 1973-92					10,616,756	1,588,795	14,850,597
Average 1983-92 10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83 Average 1973-92		8,026	3,445,914	418,232	9,770,386	1,316,709	14,959,267
10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83 Average 1973-92	1993	14,413	3,689,074	220,148	9,928,107	1,048,257	14,899,999
10,784 2,197,899 306,405 6,167,842 1,487,903 10,170,83 Average 1973-92	Average	1983-92					
Average 1973-92	50		2.197.899	306,405	6.167.842	1.487.903	10.170 833
	Average	•	=,==,,	,	3,20.,012	-110/1203	20,270,000
6.751 $1.615.420$ $200.025$ $4.646.470$ $1.109.773$ $7.578.47$	5	6,751	1,615,420	200,025	4,646,470	1,109,773	7,578,438

<sup>&</sup>lt;sup>a</sup> From 1928 until 1951 commercial salmon catches in the Aleutian Islands and the South Peninsula were combined.

b During June 18, 1984 fishers harvested 23 chinook, 63,929 sockeye, 1,900 coho, 18,950 pink, and 8,409 chum salmon in Unimak Pass. Unimak Pass was defined as closed to commercial salmon fishing under the Alaska Peninsula portion of the finfish regulations but open to commercial salmon fishing under the Aleutian Islands portion of the finfish regulation book. After 1984, regulations were passed through the Alaska Board of Fish closing the Unimak Pass area to commercial salmon fishing until at least July 10.

Table 4. South Peninsula salmon harvest by species, in number of fish, all gear combined, 1970-93.

					Spec	ies		
Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	219	4,679	1,806	1,779,525	32,571	1,737,985	993,349	4,545,236
1971	187	4,444	2,174	716,087	16,907	1,445,031	1,365,957	3,546,156
1972	210	3,124	1,332	557,422	8,021	78,221	731,814	1,376,810
1973	153	1,795	415	330,091	6,599	58,051	292,943	688,099
1974	96	853	581	197,153	9,366	100,601	71,826	379,527
1975	143	600	117	243,548	67	60,642	130,750	435,124
1976	217	2,705	2,196	375,027	216	2,366,833	532,503	3,276,775
1977	205	2,168	559	311,722	2,108	1,448,648	243,167	2,006,204
1978	248	3,860	773	579,411	60,774	5,590,145	546,182	6,777,285
1979	294	4,476	2,141	1,149,927	356,867	6,564,914	482,930	8,556,779
1980	284	5,107	4,794	3,613,025	274,181	7,861,470	1,353,112	13,106,582
1981	304	5,617	11,182	2,241,513	162,223	5,033,028	1,768,475	9,216,421
1982	302	6,286	9,845	2,345,981	256,046	6,734,905	2,272,495	11,619,272
1983	325	5,241	26,571	2,556,557	127,657	2,827,622	1,704,072	7,242,479
1984	334	6,378	9,198	2,318,028	310,950	11,589,258	1,654,622	15,882,056
1985	336	5,322	6,642	2,144,416	172,514	4,431,016	1,348,726	8,103,314
1986	335	5,132	5,589	1,223,089	235,854	4,031,487	1,749,651	7,245,670
1987	327	5,256	9,174	1,449,753	225,120	1,208,556	1,375,887	4,268,490
1988	330	6,478	11,075	1,473,651	505,533	7,044,824	1,908,507	10,943,590
1989	341	5,597	7,065	2,660,800	443,843	7,292,658	994,231	11,398,597
1990	354	6,403	16,522	2,386,844	307,218	2,865,856	1,237,826	6,814,266
1991	355	6,439	7,975	2,319,942	317,129	10,616,756	1,588,795	14,850,597
1992	341	6,512	8,026	3,445,914	418,232	9,770,386	1,316,709	14,959,267
1993	353	6,204	14,413	3,689,074	220,148	9,928,107	1,048,257	14,899,999
1002	02 7***	~~		· · · · · · · · · · · · · · · · · · ·				
1303-	92 Avera 338	5,876	10,784	2,197,899	306,405	6,167,842	1,487,903	10,170,833
1973-	·92 Avera	ıge						
	278	4,540	6,751	1,615,420	200,025	4,646,470	1,109,773	7,578,438

Table 5. List of statistical salmon fishing areas in the South Peninsula.

Area	Statistical Areas
Prior to 1991	28100 through 28499
Southeastern District <sup>a</sup>	28100 through 28299 plus 28370, 28375, 28380, and 28390
Southeastern District Mainland <sup>a</sup>	28100 through 28199 plus 28370, 28375, 28380, and 28390
East Stepovak	28134, 28135, 28136
Stepovak Flats	28133
Northwest Stepovak	28110 through 28132
Orzinski and American Bays	28131
Southwest Stepovak	28390
Balboa Bay	28380
Beaver Bay <sup>a</sup>	28370, 28375
Shumagin Islands	28200 through 28299
South Central District	28361 through 28369
Southwestern District	28300 through 28352 plus 28460
Unimak District	28400 through 28450 plus 28310
June South Unimak fishery	28310 through 28330 plus 28420 through 28460
South Peninsula after 1990	28100 through 28599
Southeastern District	28100 through 28299
Southeastern District Mainland	28100 through 28199
East Stepovak	28100 through 28125
Stepovak Flats	28130
Northwest Stepovak	28140 through 28169
Orzinski Bay	28150
American Bay	28155
Southwest Stepovak	28170
Balboa Bay	28180

Table 5. (page 2 of 2)

Area	Statistical Areas
Beaver Bay	28190
Shumagin Islands	28200 through 28299
South Central District	28300 through 28399
Southwestern District	28400 through 28499
Unimak District	28500 through 28599
June South Unimak fishery	28400 through 28599
McGinty Point to Moss Cape	28315, 28317, 28321, 28323, 28324, 28325, 28326, 28351, 28352, 28361, 28362, 28363, 28664, 28365, 28370, plus 28436, 28437, and 28438
Belkofski Bay to Kenmore Head	28312, 28320, 28331, 28332, 28333, 28334, 28335, 28341, 28342, plus 28442, 28445, 28455, 28462, 28465, 28467, 28477, 28480
Kenmore Head to Scotch Cap	28310, 28330, plus 28410, 28420, 28430, 28440, 28460, 28470, 28472, 28490, plus 28510, 28420, 28530, and 28540

In 1985, statistical area 28370 became two areas (28370 and 28375). In 1988, Beaver Bay (28375) became part of the Southeastern District while the Mino Creek-Little Coal Bay area (28370) became part of the South Central District. In 1991, statistical areas were changed to reflect Alaska Board of Fish management plans. As an aid in comparing statistics, catches from 1970-90 from statistical areas 28370 and 28375 have been designated as Beaver Bay catches from the Southeastern District. After 1990, these statistical areas were eliminated, Beaver Bay became 28190 (Southeastern District) and the Mino Creek-Little Coal Bay area became 28317 and 28315 (South Central District).

Table 6. Salmon escapement survey counts in the South Peninsula, 1993.

	Stream				Sp	ecies		_	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHEASTERN	N DISTRICT								
281-35.07		08-Sep	Good	0	0	400	0	McCullough	
281-35.06	Boulder Bay	07-Aug 19-Aug	Good Good	0	0	0 600	0 100	McCullough McCullough	300 pinks at mouth, and 50 pinks in lagoo 150 pinks at mouth; 300 of pinks were in the lagoon.
		08-Sep	Good	0	0	450	50	McCullough	250 of the pinks were in the lagoon.
281-35.05	Fox Bay	07-Aug	Good	0	0	0	0	McCullough	50 pinks at mouth, plus 25 pinks in lagoo
		19-Aug	Good	0	0	200	0	McCullough	300 pinks at mouth, plus 800 pinks in the lagoon. Fresh dead pink salmon in Fox Bay, likely dropouts from illegal fishing activity because this area has been closed for a we
		08-Sep	Good	0	0	2,600	0	McCullough	100 of the pinks were in the lagoon, plus 500 pink carcasses, good escapement.
281-35.04	Fox Bay	07 - Aug	Good	0	0	0	0	McCullough	
	•	19-Aug	Good	0	0	50	Ō	McCullough	1,500 pinks at mouth, and 100 pinks in the lagoon.
		08-Sep	Good	0	0	450	50	McCullough	50 pink carcasses.
281-35.02	Fox Bay	07-Auq	Good	0	0	0	0	McCullough	
202 00.02	2011 2017	12-Aug	Good	Ô	ő	400	ő	Shaul	4,000 pinks at mouth, plus 3,000 pinks along beach. Goose survey.
		19-Aug	Good	0	0	3,600	0	McCullough	100 pinks at mouth plus 50 pinks in the lagoon, good escapement for this date.
		08-Sep	Good	0	0	11,500	0	McCullough	200 pink carcasses, no name stream betwee 35.02 and Dome Point had 500 pinks at mouth and 1,500 in stream.
Not numbered Stream west Currently id stream 281.3	of 281-35.02 lentified as	07-Aug	Good	0	0	0	0	McCullough	50 pinks at mouth.
281-34.08	Island Bay	07-Aug	Good	0	0	0	0	McCullough	
	4	19-Aug	Good	Ö	ō	1,200	ő	McCullough	100 pinks at mouth.
		08-Sep	Good	0	0	1,000	0	McCullough	Plus 250 pink carcasses.
Not numbered Stream south	l. Unnamed a of 281-34.08	08-Sep	Good	0	0	0	0	McCullough	50 pinks at mouth.

Table 6. (page 2 of 24)

	Stream				Sp	ecies				
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum .	Observer	Remarks <sup>a,b</sup>	
SOUTHEASTER	N DISTRICT (Cont.)									
281-34.07	Island Bay	07-Aug 19-Aug	Good Good	0 0	0 0	25 200	0	McCullough McCullough	600 pinks at mouth. 100 pinks at mouth, plus 20 pinks in the lagoon.	
		08-Sep	Good	0	0	3,000	0	McCullough	50 pinks at mouth.	
281-34.06	Island Bay	07-Aug 12-Aug	Good Good	0 0	0	100 0	0	McCullough Shaul	800 pinks at mouth, split with 281-34.05 Beach too choppy. 5,000 pinks at mouth, split fish at mouth with stream 281-34.09 Goose survey.	
		19-Aug	Good	0	0	200	0	McCullough	Fresh dead pink salmon in Island Bay. Likely dropouts from illegal fishing since this area closed on 8-13 and the fish were too fresh to be from the last legal opening. Plus 50 pinks in lagoon.	
		09-Sep	Good	0	0	8,000	0	McCullough	2,500 pinks at mouth. Split fish at mout with 34.05. Plus 1,500 pinks in lagoon.	
281-34.05	Island Bay	07-Aug 12-Aug	Good Good	0 0	0	0	0 0	McCullough Shaul	800 pinks at mouth, split fish at mouth with 34.06. Beach too choppy. 5,000 pink at mouth, split fish at mouth with 281-34 Goose survey.	
		19-Aug	Good	0	0	400	0	McCullough	1,000 pinks at mouth, split fish at mout with 34.06	
		08-Sep	Good	0	0	3,500	0	McCullough	2,500 pinks at mouth, split fish at mout with 34.06. Plus 1,500 pink salmon in the lagoon.	
81-34.04	Unnamed	07-Aug	Good	0	0	0	0	McCullough		
	3111211113 U	19-Aug	Good	0	Ō	200	0	McCullough	800 pinks at mouth.	
		08-Sep	Good	Ō	Ö	2,300	Ō	McCullough	F	
81-34.03	Stonehouse	07~Aug	Good	0	0	150	0	McCullough	5,000 pinks at mouth.	
		12-Aug	Good	0	0	400	0	Shaul	8,000 pinks at mouth. One beach seiner i area. Goose survey.	
		19-Aug	Fair	0	0	2,300	0	McCullough	4,000 pinks at mouth, plus 150 pinks in lagoon.	
		08-Sep	Good	0	0	33,000	0	McCullough	Beach muddy and turbulent. 2,500 pinks at mouth; plus 300 pink carcasses. Excellent escapement.	
281-34.02	Osterback	07-Aug 12-Aug	Good Good	0 0	0 0	25 1,800	0	McCullough Shaul	2,000 pinks at mouth. 2,000 pinks at mouth, zero along beach. Goose survey.	

Table 6. (page 3 of 24)

	Stream		<b>a</b>		Sp	ecies		_		
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b	
SOUTHEASTER	N DISTRICT (Cont.)									
281-34.02 (	Cont.)	19-Aug	Fair	0	0	400	0	McCullough	2,500 pinks at mouth. Muddy at beach and in creek, counts probably low.	
		08-Sep	Good	0	0	30,000	0	McCullough	1,500 pinks at mouth. Excellent escapemen	
81-34.01	Granville-	07-Aug	Good	0	0	0	0	McCullough		
	Portage Inlet	19-Aug 08-Sep	Good Good	0	0	0 1,500	500 300	McCullough	10 pink salmon in the lagoon.	
		ua-sep	Good	U	U	1,500	300	McCullough	Plus 150 pink salmon in the lagoon.	
81-33.06	Stepovak Flats	07-Aug	Fair	0	0	0	50	McCullough	Muddy at mouth.	
		19-Aug	Good	10	0	. 0	50	McCullough	Either sockeye or chinook, species ID on the bright red fish is questionable.	
		08-Sep	Good	0	0	250	100	McCullough	the bright red rish is questionable.	
281-33.05	Stepovak River	04-Aug	Poor	0	0	0	0	Campbell	Muddy water. Normally clear tributaries	
		22-Aug	Poor	0	0	0	1,600	McCullough	also muddy. 900 pinks at mouth. Main stem muddy,	
		zz nug	1001	Ū	v	J	1,000	necurrough	tributaries clear. Fish only in lower cle	
		00 0	n- :		•	15 000	0.000	W=0-111	tributaries.	
		08-Sep	Fair	0	0	15,000	2,000	McCullough	Only a few of the normally clear tributar were clear. Where I could see, the pink escapement was good and the chum escapeme was poor.	
81-33.04	Big River	28-Jul	Good	0	. 0	0	0	McCullough	25 chums at mouth; Salmon at mouth of cle	
									tributary and main stem of Big River. Surveyed clear tributaries only.	
		04-Aug	Poor	0	0	0	175	Campbell	Surveyed clear tributaries only.	
		22-Aug	Good	0	0	12,000	900	McCullough	Main stem muddy. Most pinks in lower port of stream.	
		09-Sep	Fair	0	0	3,000	1,500	McCullough	Most normally clear tributaries were mudd	
									Where visible the pink escapement was good and the chum escapement was poor.	
81-33.03	Louie's Corner	04 - Aug	Poor	0	0	0	0	Campbell	Surveyed clear tributaries only.	
		22-Aug	Good	0	0	11,600	1,500	McCullough	Surveyed the clear tributaries only. Most	
		08-Sep	Fair	0	0	15,000	3,000	McCullough	pinks in the lower mile of stream. Surveyed the clear tributaries only.	
81-33.02	Ramsey Bay	04-Aug	Poor	0	0	0	0	Campbell	Muddy water.	
.01-33.02	Kamacy Day	22-Aug	Fair	0	0	1,300	200	McCullough	Muddy water. Muddy water.	
		08-Sep	Fair	0	0	2,500	500	McCullough	Muddy water.	
81-33.01	Ramsey Bay	04-Aug	Poor	0	0	0	0	Campbell	Muddy water. Nothing in clear tributaries	
		22-Aug	Poor	ō	ő	ō	ő	McCullough	Muddy water.	
		08-Sep	Poor	0	0	1,000	250	McCullough	Muddy water.	

Table 6. (page 4 of 24)

	Stream		_		Sp	ecies		-		
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b	
SOUTHEASTER	N DISTRICT (Cont.)			•						
281-32.07	Grub Gulch	28-Jul 04-Aug 07-Aug 12-Aug 22-Aug 08-Sep	Poor Poor Fair Good Good Good	0 0 0 0 0	0 0 0 0	0 50 400 20,000 35,000	0 30 100 300 400	McCullough Campbell McCullough Shaul McCullough McCullough	Muddy but should have seen any fish prese Muddy but fish were moving in main channe Muddy and windy. Mouth murky, no signs. Goose survey. 150 pinks at mouth. Good pink escapement. Good pink escapement.	
281-32.06	Clark Bay Stream	Not	Surveyed							
281-32.05	Clark Bay	28-Jul 02-Aug	Fair Good	0	0 0	0 25	0	McCullough McCullough	300 pinks at mouth. Plus several schools :	
		08-Aug 22-Aug 08-Sep	Good Good Good	0 0 0	0 0 0	2,200 23,000	100 0 250	McCullough McCullough McCullough	200 chums at mouth. 400 pinks at mouth. Good pink escapement. Some pinks are stillin a ball in the lower portion of the sprinarea.	
281-32.04	Little Norway	28-Jul 02-Aug 08-Aug 12-Aug	Fair Good Good Good	0 0 0	0 0 0	0 300 1,400 700	0 0 0	McCullough McCullough McCullough Shaul	2,500 pinks at mouth. 1,200 pinks at mouth. 300 pinks at mouth, plus 300 pinks along the beach. Goose survey.	
		22-Aug 08-Sep	Good Good	0 0	0 0	6,000 14,000	1,000 1,500	McCullough McCullough	400 pinks at mouth.	
281-31.03	Orzinski Lake and Stream <sup>c</sup>	04-Aug 08-Aug	Good Good	50 125	0 0	200 500	0	McCullough McCullough	1,000 pinks at mouth. Surveyed outlet only 3,000 pinks at mouth. Most sockeye spawner on north shore.	
		12-Aug 19-Aug 08-Sep	Good Good Good	0 200 0	0 0 0	900 19,000 28,000	300 0	Shaul McCullough McCullough	5,000 pinks at mouth. Goose survey. Counted fish in outlet only. South shore sockeye now spawning. The bea and spring areas are full of spawning socke	
281-20.04	Windbound Bay	02-Aug 08-Aug 19-Aug	Good Good Good	0 0 0	0 0	0 125 500	0 0 0	McCullough McCullough McCullough	200 pinks at mouth. 400 pinks at mouth, plus several schools of salmon in deep water.	
		22-Aug 08-Sep	Poor Good	0 0	0	1,600	0	McCullough McCullough	Muddy water.	
281-20.03	Chichagof, East	Not	Surveyed							
281-20.02	Chichagof	02-Aug	Good	0	0	0	0	McCullough	150 chums at mouth, and 400 chums in the lagoon.	

Table 6. (page 5 of 24)

	Stream		_	_	Sp	ecies		-	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks <sup>a,b</sup>
SOUTHEASTER	N DISTRICT (Cont.)								
281-20.02 (	Cont.)	08-Aug	Good	0	0	1,500	0	McCullough	250 pinks at mouth, and 250 pinks in the lagoon.
		19-Aug	Good	0	0	3,000	0	McCullough	7,000 pinks at mouth, and 100 chums in the lagoon.
		08-Sep	Good	0	0	14,000	500	McCullough	-
281-20.01	Chichagof Bay	08-Aug	Good	0	0	700	0	McCullough	300 pinks at mouth.
	Stream	08-Sep	Fair	0	0	5,000	0	McCullough	The stream is cutting a new channel, and the lower 1/2 of the stream is muddy.
81-10.04	West Cove	02-Aug	Good	0	0	0	0	McCullough	
		08-Aug	Poor	0	0	100	0	McCullough	Turbulent.
		19-Aug	Poor	0	0	0	0	McCullough	Muddy and turbulent.
		22-Aug	Good	0	0	3,100	0	McCullough	400 pinks at mouth.
		08-Sep	Poor	0	0	2,000	0	McCullough	Poor conditions; count is probably low.
81-10.03	Suzy's Creek	28-Jul	Good	0	0	10,700	0	McCullough	250 pinks at mouth. The fish are in the lower 2/3 of creek.
		31-Jul	Good	0	0	8,100	0	Shaul	17,000 pinks at mouth. Most of the fish are in the upper 1/2 of the creek, lowe section is empty. Fish at mouth will likely disappear dur tomorrow's opening.
		02-Aug	Good	0	0	12,000	0	McCullough	3,000 pinks at mouth.
		04-Aug	Good	0	0	12,000	0	Campbell	2,000 pinks at mouth.
		07-Aug	Good	0	0	0	0	McCullough	2,000 pinks at mouth. Surveyed mouth on
		08-Aug	Poor	0	0	2,500	0	McCullough	2,800 pinks at mouth. Turbulent. Only surveyed lower 1/4 mile.
		12-Aug	Good	0	0	30,700	0	Shaul	2,000 pinks at mouth.
		19-Aug	Poor	0	0	0	0	McCullough	6,000 pinks at mouth. Water muddy; turbulent.
		22-Aug	Good	0	0	68,000	0	McCullough	5,000 pinks at mouth. Good escapement.
81-10.02	Dorenoi Bay	28-Jul	Fair	0	0	0	0	McCullough	
	(minor stream)	02-Aug	Good	0	0	2,200	0	McCullough	1,000 pinks at mouth.
		08-Aug	Fair	0	0	100	0	McCullough	1,000 pinks at mouth. Water turbulent.
		19-Aug	Poor	0	0	0	0	McCullough	Muddy water.
		22-Aug	Good	0	0	2,100	0	McCullough	2,000 pinks at mouth.
		08-Sep	Fair	0	0	4,500	0	McCullough	
81-10.01	Dorenoi Bay	28-Jul	Fair	0	0	. 0	0	McCullough	
	Stream	02-Aug	Good	0	0	150	0	McCullough	100 pinks at mouth.
		08-Aug	Fair	0	0	4,900	0	McCullough	2,200 pinks at mouth, Turbulent.
		19-Aug	Good	0	0	5,400	0	McCullough	150 pinks at mouth.
		22-Aug	Good	0	0	19,000	0	McCullough	300 pinks at mouth. Good escapement.
		08-Sep	Fair	0	0	6,000	0	McCullough	Rainy; muddy water.

Table 6. (page 6 of 24)

	Stream		-		qZ	ecies			
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHEASTER	N DISTRICT (Cont.)								
281-90.04	San Diego Bay	28-Jul	Good	0	0	0	0	McCullough	300 chum salmon in the bay.
		02-Aug	Good	0	0	0	5	McCullough	
		07-Aug	Good	0	0	5,000	20	McCullough	1,500 pinks at mouth.
		19-Aug	Good	0	0	1,500	400	McCullough	2,500 pinks at mouth; plus 50 pink
		08-Sep	Good	0	0	11,000	800	McCullough	carcasses in the lagoon. 300 chum and 150 pink carcasses in the lagoon.
281-90.04	San Diego Lagoon	02-Aug	Good	0	0	0	50	McCullough	,
	3 3	07-Aug	Good	0	0	5,000	20	McCullough	1,500 pinks at mouth.
		19-Aug	Good	0	0	200	50	McCullough	
		08-Sep	Good	0	0	0	0	McCullough	300 chum and 150 pink carcasses.
281-90.03	San Diego Bay West Side	28-Jul	Good	0	0	100	0	McCullough	
281-90.02	Rough Beach Creek	31-Jul	Good	0	0	2,600	0	Shaul	2,000 pinks at mouth and 5,000 along beach.
		02-Aug	Good	0	0	4,800	0	McCullough	2,000 pinks at mouth.
		07-Aug	Good	0	0	13,500	0	McCullough	5,000 pinks at mouth. F/V Jeanelle illegally fishing at mouth.
		12-Aug	Good	0	0	12,800	0	Shaul	2,000 pinks at mouth. Did not survey upper 1/2 mile of spawning area. Goose survey.
		19-Aug	Fair	0	0	21,500	0	McCullough	10,000 pinks at mouth. Muddy water, schools in deep water.
		22-Aug	Good	0	0	32,000	0	McCullough	3,000 pinks at mouth.
		08-Sep	Poor	0	0	15,000	0	McCullough	Poor conditions in lower portion of strea upper portion had good visibility and excellent escapement.
281-90.01	Swedania Point	31-Jul	Good	0	0	200	0	Shaul	500 pinks at mouth.
	Creek	04 - Aug	Good	0	0	300	0	Campbell	-
		07-Aug	Good	0	0	400	0	McCullough	50 pinks at mouth.
		12-Aug	Good	0	0	4,000	0	Shaul	10,000 pinks at mouth. Goose survey.
		19-Aug	Fair	0.	0	8,600	0	McCullough	2,500 pinks at mouth. Muddy water.
		22-Aug	Good	0	0	21,000	0	McCullough	1,500 pinks at mouth.
		08-Sep	Good	0	0	36,000	0	McCullough	Good escapement.
281-80.16	Ballast Island	07-Aug	Fair	0	0	0	0	McCullough	50 pinks at mouth. Windy.
		19-Aug	Fair	Ö	ō	ō	ŏ	McCullough	50 pinks at mouth.
		08-Sep	Fair	Ō	0	5.0	0	McCullough	•

Table 6. (page 7 of 24)

	Stream		_		Sp	ecies		_	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*.b
SOUTHEASTER	N DISTRICT (Cont.)								
281-80.15	Coleman Creek	02-Aug	Good	0	0	100	150	McCullough	1,500 pinks at mouth.
		07-Aug	Poor	0	0	0	0	McCullough	200 pinks at mouth. Windy.
		12-Aug	Good	0	0	200	0	Shaul	4,000 chums at mouth. Goose survey.
		19-Aug	Good	0	0	4,100	200	McCullough	1,100 pinks at mouth.
		08-Sep	Good	0	0	45,000	1,000	McCullough	Plus 2,500 carcasses
281-80.14	Johnson Creek	02-Aug	Good	0	0	100	300	McCullough	1,500 pinks at mouth. Plus another 3,00 pinks and 500 chums in Albatross Anchorage.
		07-Aug	Fair	0	0	150	300	McCullough	4,000 pinks at mouth. Windy.
		19-Aug	Good	0	0	7,000	350	McCullough	300 pinks at mouth. Jumpers in the deep in Albatross.
		08-Sep	Good	0	0	7,500	400	${\tt McCullough}$	Plus 3,500 pink salmon carcasses.
281-80.12	Foster's Camp	19-Aug	Good	0	0	900	0	McCullough	150 pinks at mouth.
20- 00.22	(Bassett)	08-Sep	Good	0	Ō	3,500	0	McCullough	150 pinks at mouth. Plus 250 pink carcasses.
281-80.11	Monolith Point	02-Aug	Good	0	0	0	0	McCullough	2,500 pinks at mouth.
	Creek	07-Aug	Fair	. 0	0	200	0	McCullough	200 pinks at mouth.
		19-Aug	Good	0	0	250	ō	McCullough	Needs more fish.
		08-Sep	Good	0	0	5,500	0	McCullough	Good pink escapement.
281-80.09	Foster Creek	28-Jul	Good	0	0	2,500	0	McCullough	1,500 pinks at mouth. Bay was choppy.
		04-Aug	Good	0	0	5,500	0	Campbell	5,000 pinks at mouth. Additional 15-20,000 salmon along the beach.
		07-Aug	Good	0	0	4,500	0	McCullough	10,000 pinks at mouth. Surveyed lower 1/2 mile.
		12-Aug	Good	0	0	9,300	0	Shaul	13,000 pinks at mouth. Surveyed all but left fork.
		16-Aug	Excellent	0	0	38,000	1,000	Shaul	8,000 pinks at mouth. Excellent escapement.
		22-Aug	Good	0	0	31,000	0	McCullough	Plus 500 chum salmon carcasses.
		08-Sep	Good	0	0	15,000	0	McCullough	
281-80.08	Lefthand Bay	28-Jul	Good	0	0	250	300	McCullough	500 pinks at mouth. Chum upriver 3 miles; pinks in lower river.
		04-Aug	Good	0	0	0	0	Campbell	Surveyed bay only. 150,000 salmon in bay along shore.
		07-Aug	Good	0	0	7,100	150	McCullough	6,000 pinks at mouth; more in Lefthand Bay.
		12-Aug	Good	0	0	12,700	0	Shaul	8,000 rinks at mouth. Some were probably chums. Nothing above small water fall. Goose survey.

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Table 6. (page 8 of 24)

	Stream		_		Sp	ecies		•	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHEASTER	N DISTRICT (Cont.)								
281-80.08 (	Cont.)	16-Aug	Poor	0	0	5,200	2,600	Shaul	2,000 chums at mouth. Species ID difficult; count probably low. Additional 10,000 pinks along beach.
		22-Aug	Good	0	0	17,000	500	McCullough	300 pinks at mouth. A waterfall which the fish are not able to clear has reduced the spawning area by 50%.
281-80.06	Cape Aliaksin	02-Aug	Good	0	0	150	0	McCullough	300 pinks at mouth.
	-	07-Aug	Good	0	0	900	0	McCullough	2,000 pinks at mouth.
		16-Aug	Good	0	0	28,000	0	Shaul	3,000 pinks at mouth. Excellent escapement.
		19-Aug	Fair	0	0	17,500	0	McCullough	1,200 pinks at mouth. Muddy at mouth. Turbulent.
281-80.05	Cape Aliaksin	02-Aug	Good	0	0	20	0	McCullough	600 pinks at mouth. Beach seiner along the beach.
		07-Aug	Good	0	0	450	0	McCullough	1,300 pinks at mouth.
		16-Aug	Good	Ō	ō	6,000	Ō	McCullough	2,000 pinks at mouth. Excellent escapement.
		19-Aug	Fair	0	0	4,200	0	McCullough	75 pinks at mouth. Muddy at mouth. Turbulent.
		08-Sep	Fair	0	0	9,500	0	McCullough	Plus 1,500 pink salmon carcasses.
281-80.04	Cape Aliaksin	02-Aug	Good	0	0	200	0	McCullough	1,200 pinks at mouth. Several pink schools along beach.
		07-Aug	Good	0	0	1,300	0	McCullough	1,500 pinks at mouth.
		16-Aug	Good	0	0	17,500	0	Shaul	5,000 pinks at mouth. Excellent escapement.
		19-Aug	Fair	0	0	12,100	0	McCullough	500 pinks at mouth. Muddy at mouth. Turbulent.
		08-Sep	Good	0	0	8,000	0	McCullough	Plus 250 pink salmon carcasses.
281-70.06	Kagayan Flats	Not Survey	yed						
281-70.05	Beaver River	28-Jul	Poor	0	0	0	0	McCullough	Surveyed mouth only. Muddy water.
	Douter River	31-Jul	Good	0	ő	900	1,800	Shaul	Partial survey; below forks plus the cleafork.
		04 - Aug	Good	0	0	2,000	4,000	Campbel1	Muddy at mouth. Good conditions in stream
		07-Aug	Poor	0	0	0	0	McCullough	Muddy water, and turbulent.
		12-Aug	Fair	0	0	12,000	6,000	Shaul	Surveyed main stem down from upper fork. Species estimate difficult. Goose survey.
		22-Aug	Fair	0	0	18,300	1,400	McCullough	Surveyed clear tributaries only; main stem muddy.
		25-Aug	Fair	0	0	3,900	1,500	Shaul	Surveyed clear tributaries only; main stem muddy.

Table 6. (page 9 of 24)

St	ream				Sp	ecies		_	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks <sup>a,b</sup>
SOUTHEASTERN	DISTRICT (Cont.)								
281-70.04	Smiley Creek	31-Jul	Good	0	0	300	0	Shaul	100 pinks at mouth; 1,000 pinks along the beach.
		04-Auq	Good	0	0	1,000	0	Campbell	2,000 pinks at mouth.
		07-Aug	Good	0	0	5,200	0	McCullough	2,000 pinks at mouth. Most salmon in lower section.
		12-Aug	Good	0	0	13,000	0	Shaul	Goose survey.
		25-Aug	Good	0	0	30,000	0	Shaul	2,000 pinks at mouth; stream is full.
		08-Sep	Good	0	0	7,000	0	McCullough	Plus 700 pink salmon carcasses.
282-13.01	Unga Spit	Not Surve	yed						
282-13.02	Dry Lagoon	28-Jul	Fair	0	0	6,000	250	McCullough	200 pinks at mouth; 150 pinks in lagoon
		02-Aug	Good	0	0	8,000	60	McCullough	100 pinks at mouth; 100 pinks in lagoon.
		07-Aug	Good	0	0	15,000	150	McCullough	50 pinks at mouth; zero pinks in lagoon.
		19-Aug	Fair	0	0	24,000	0	McCullough	50 pinks at mouth; zero pinks in lagoon Count likely low because of muddy water.
		22-Aug	Good	0	0	37,000	0	McCullough	Good escapement.
		08-Sep	Good	0	0	7,000	0	McCullough	Plus 300 pink salmon carcasses.
282-13.03	Bay Point	28-Jul	Poor	0	0	2,500	200	McCullough	Poor visibility at mouth. 250 pinks in lagoon.
		31-Jul	Good	0	0	5,600	0	Shaul	5,000 pinks at lagoon mouth; plus 3,000 pinks in lagoon.
		02-Aug	Good	0	0	14,000	0	McCullough	Fish schooled in pools.
		07-Aug	Good	0	0	14,000	500	McCullough	400 pinks at mouth; plus 1,100 pinks in lagoon.
		16-Aug	Good	0	0	46,700	200	Shaul	200 chums at mouth. Excellent pink escapement.
		19-Aug	Good	0	0	44,000	0	McCullough	2,000 pinks at mouth; plus 25 pinks in lagoon.
		08-Sep	Good	0	0	8,500	0	McCullough	Plus 500 pink salmon carcasses.
282-13.04	Pinnacle Point	16-Aug	Fair	0	0	4,300	0	Shaul	Fish count may be low due to dark streambed.
		19-Aug	Fair	0	0	1,200	0	McCullough	Turbulent.
282-13.05	Unnamed	19-Aug	Fair	0	0	0	0	McCullough	Turbulent.
		08-Sep	Good	0	0	150	0	McCullough	·
282-13.06	Unnamed	19-Aug	Fair	0	0	0	0	McCullough	Turbulent.
		08-Sep	Good	0	0	50	0	McCullough	
282-10.02	Apollo Creek	02-Aug	Good	0	0	150	0	McCullough	1,000 pinks at mouth.
202 10.02	Minor	07-Aug	Good	ő	ő	150	ő	McCullough	150 pinks at mouth.
		19-Aug	Fair	Ö	ő	10,300	ō	McCullough	<u>.</u>

Table 6. (page 10 of 24)

	Stream		_		Sp	ecies		_	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks <sup>a,b</sup>
OUTHEASTE	RN DISTRICT (Cont.)								
282-10.02	(Cont.)	22-Aug	Good	0	0	15,200	0	McCullough	Good escapement.
10.02	(00)	08-Sep	Good	ō	Ō	13,000	Ō	McCullough	
282-10.03	Apollo Creek	02-Aug	Good	0	0	400	0	McCullough	50 pinks at mouth.
282-10.03	Apollo Creek	02-Aug 07-Aug	Good	0	0	1,300	0	McCullough	200 pinks at mouth.
				0	0	5,100	0	Shaul	200 pinks at moden.
		16-Aug	Fair	0	0		0		Turbulent.
		19-Aug	Poor	•	-	1,600	-	McCullough	
		22-Aug	Good	0	0	12,500	0	McCullough	Good escapement.
		08-Sep	Good	0	0	9,000	0	McCullough	
282-10.04	Acheredin Lake	28-Jul	Poor	80	0	0	0	McCullough	Lake choppy.
		02-Sep	Good	1,200	0	0	0	McCullough	Fish are colored.
282-10.06	Unnamed	Not	Surveyed						
282-10.10	Unnamed	08-Sep	Good	0	0	25	0	McCullough	
282-10.11	Apollo Gold Mine	02-Aug	Good	0	0	4,000	0	McCullough	1,500 pinks at mouth.
	(Delarof Harbor)	07-Aug	Good	0	0	2,900	0	McCullough	400 pinks at mouth; plus 1,500 pinks in the lagoon.
		16-Aug	Good	0	0	15,500	0	Shaul	Good escapement.
		19-Aug	Poor	Ō	Ō	0	0	McCullough	Very turbulent.
		22-Aug	Good	ō	ŏ	11,000	ō	McCullough	200 pinks at mouth.
		08-Sep	Good	ő	ŏ	6,000	ő	McCullough	Plus 1,500 pink carcasses.
		00-3ep	900u	Ü	J	0,000	Ū	necurrougn	ridb 1/500 prim carcaboes.
282-10.12	Unga Cape Stream	08-Sep	Good	0	0	300	0	McCullough	
282-10.13	Baralof Bay	02-Aug	Good	0	0	0	. 0	McCullough	
		07-Aug	Good	ő	ō	Ö	0	McCullough	
		08-Sep	Poor	ő	10	300	ŏ	McCullough	
		12-Sep	Good	125	360	125	Ö	McCullough	Foot/skiff survey; took 60 coho for brood stock analysis.
282-10.14	Squaw Harbor	02-Aug	Good	0	0	0	0	McCullough	
.02 10.14	Minor	07-Aug	Good	ŏ	ő	100	ő	McCullough	2,000 pinks at mouth.
	HILIOI	16-Aug	Fair	ő	ő	800	ŏ	Shaul	1,000 pinks along the beach.
		22-Aug	Good	0	0	3,500	0	McCullough	600 pinks at mouth.
		08-Sep	Good	0	0	9,000	0	McCullough	Many are still balled up in the
		uo-sep	Good		U	9,000	U	ccurrough	lower portion of stream.
282-10.15	Squaw Harbor	02-Aug	Good	0	0	0	20	McCullough	100 pinks at mouth.
202-10.15			Good	0	0	2,600	0	McCullough	150 pinks at mouth.
	Major	07-Aug		0	0		0	Shaul	4,000 pinks at mouth. Goose survey
		12-Aug	Good		0	4,000	0		4,000 prinks at mouth. Goose survey
		16-Aug	Fair	0	U	11,400	U	Shaul	

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Table 6. (page 11 of 24)

	Stream				Sp	ecies		-	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHEASTER	DISTRICT (Cont.)						1 100		
282-10.15 (0	ont )	22-Aug	Good	0	0	19,000	0	McCullough	2,000 pinks at mouth.
(	,	08-Sep	Good	ő	Ö	42,500	Ö	McCullough	Many are still balled up in the lower portion of stream.
282-10.16	Ben Green Bight Farm	31-Jul	Good	0	0	200	0	Shaul	No salmon at mouth, but 1,000 pinks along the beach.
	-	02-Aug	Good	0	0	300	0	McCullough	400 pinks at mouth.
		07-Aug	Good	0	0	300	Ō	McCullough	50 pinks at mouth.
		16-Aug	Fair	0	0	2,600	0	Shaul	1,500 pinks at mouth. 2 beach seiners and 1 gillnetter anchored.
		19-Aug	Good	0	0	2,600	0	McCullough	50 pinks at mouth. Turbulent.
		22-Aug	Good	0	0	3,200	0	McCullough	300 pinks at mouth.
		08-Sep	Good	0	0	8,500	0	McCullough	500 pinks at mouth; plus 300 pink carcasses. The stream's escapement
282-10.17	NE Unga I.	Not	Surveyed						was robbed for halibut bait.
282-12.10	No Name	02-Aug	Good	0	0	0	6	McCullough	
		07-Aug	Good	0	0	0	0	McCullough	
		22-Aug	Good Good	0	0	0	0	McCullough	No fish observed.
282-12.09	South Quartz	28-Jul	Fair	0	0	0	0	McCullough	20 chums at mouth.
	Point	02-Aug	Good	0	0	150	0	McCullough	350 pinks at mouth.
		07-Aug	Good	0	0	0	0	McCullough	600 pinks at mouth.
		22-Aug	Good	0	0	300	0	McCullough	
282-12.08	South Quartz	28-Jul	Fair	0	0	0	0	McCullough	
	Point	02-Aug	Good	0	0	50	0	McCullough	150 pinks at mouth.
		07-Aug	Good	0	0	10	0	McCullough	50 pinks at mouth.
		22-Aug	Good	0	0	500	0	McCullough	•
282-12.07	Zachary Bay	28-Jul	Fair	0	0	0	0	McCullough	200 chums at mouth.
	22	02-Aug	Good	Ö	ō	25	Ö	McCullough	350 pinks at mouth.
		07-Aug	Good	0	0	100	Ō	McCullough	250 pinks at mouth split with 282-12.06.
		22-Aug	Good	0	0	700	0	McCullough	Plus 300 salmon carcasses at mouth split with 12.06.
282-12.06	Zachary Bay	28-Jul	Fair	0	0	0	0	McCullough	200 chums at mouth.
		02-Aug	Good	Ö	ő	100	ő	McCullough	50 pinks at mouth.
		07-Aug	Good	Ó	Ö	75	ő	McCullough	250 pinks at mouth split with 282-12.07.
		22-Aug	Good	0	0	300	0	McCullough	Plus 300 salmon carcasses at mouth split with 12.07.

Table 6. (page 12 of 24)

	Stream		_		Sp	ecies		<del>-</del>	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHEASTER	N DISTRICT (Cont.)								
282-12.05	Zachary Bay	28-Jul	Fair	0	0	0	0	McCullough	200 chums at mouth.
	• •	02-Aug	Good	0	0	300	300	McCullough	3,000 pinks at mouth; plus 100 chum carcasses.
		07-Aug	Good	0	0	1,800	400	McCullough	8,000 pinks at mouth split with 282-12.04; plus 400 chum carcasses.
		22-Aug	Good	0	0	2,800	0	McCullough	Plus 2,000 salmon carcasses at mouth split with 12.04.
282-12.04	Zachary Bay	28-Jul	Fair	0	0	0	0	McCullough	200 chums at mouth.
		02-Aug	Good	0	0	100	0	McCullough	500 pinks at mouth.
		07-Aug	Good	0	0	800	0	McCullough	8,000 pinks at mouth split with $282-12.05$ .
		22-Aug	Good	0	0	500	0	McCullough	Plus 2,000 salmon carcasses at mouth split with 12.05.
282-12.03	Zachary Bay	28-Jul	Good	0	0	0	0	McCullough	80 chums at mouth.
		02-Aug	Good	0	0	100	0	McCullough	50 pinks at mouth.
		07-Aug	Good	0	0	100	0	McCullough	2,000 pinks at mouth.
		22-Aug	Good	0	0	400	200	McCullough	· ·
282-12.02	Zachary Bay	02-Aug	Good	0	0	0	0	McCullough	
	• •	07-Aug	Good	0	0	0	0	McCullough	
282-12.01	Zachary Bay	02-Aug	Good	0	0	0	0	McCullough	
	Coal Harbor West	07-Aug	Good	0	0	0	0	McCullough	
282-10.18	Humbolt Creek	21-Sep	Good	0	110	500	0	Campbell	Surveyed from road to lagoon. 500 pink carcasses in stream. Foot survey.
282-11.01	Salmon Ranch	02-Aug	Good	0	0	20	0	McCullough	25 pinks at mouth. Beach seiner fishing near mouth.
		07 - Aug	Good	0	0	75	0	McCullough	2,500 pinks at mouth.
		22-Aug	Good	0	ō	450	0	McCullough	2,300 pinks at mouth.
282-11.03	Fox Hole	02-Aug	Good	0	0	25	0	McCullough	300 pinks at mouth; 100 pinks in lagoon
	(Little Harbor)	22-Aug	Good	0	0	2,200	0	McCullough	3,500 pinks at mouth.
282-11.06	Korovin Island	04 - Aug	Poor	0	0	0	0	Campbell	Muddy at mouth.
		08-Sep	Fair	50	0	0	Ō	McCullough	200 pinks at mouth.
282-20.00	Sanborn Harbor	Not	Surveyed						
282-20.03	Sanborn Harbor	Not	Surveyed						

Table 6. (page 13 of 24)

	Stream		_		Sp	ecies		_	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHEASTERN	DISTRICT (Cont.)							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
282-20.04	Sanborn Harbor	Not	Surveyed						
282-20.05	Falmouth Harbor	Not	Surveyed						
SOUTHCENTRAI	DISTRICT								
283-70.03	McGinty Point	31-Jul	Good	0	0	2,000	0	Shaul	300 pinks at mouth.
		07-Aug	Good	0	0	6,400	0	Shaul	
		12-Aug	Good	0	0	51,000	0	Shaul	Full
		25-Aug	Good	0	0	41,000	0	Shaul	Nothing at mouth.
283-70.02	East of Mino	31-Jul	Good	0	0	15,500	0	Shaul	All but 15,000 below forks, many spreading out.
		07-Aug	Good	0	0	55,000	0	Shaul	Surveyed to forks, Likely another 10-30,000 above.
		25-Aug	Good	0	0	76,500	0	Shaul	10-30,000 above.
283-70.01	Mino Creek	16-Jul	Good	0	0	3,000	400	Shaul	All below forks; chums in lower 300 yds.
		23-Jul	Good	0	0	28,000	1,000	Shaul	Several thousand Dolly Varden (DV). 1,100 in E, 900 in A above forks. Chums
		28-Jul	Poor	0	0	10,000	0	McCullough	in lower end. 250 pinks at mouth. Mouth choppy. Surveyo
		31-Jul	Good	0	0	113,400	0	Shaul	to D fork turned back because of fog. 2,000 pinks at mouth; 76,000 below fork of Crew from F/V Dynasty enjoying the fine weather anchored in creek (seine skiff as seine).
		07-Aug	Good	0	0	172,000	0	Shaul	Didn't survey into canyon due to turbuler probably another 20-40,000 above.
		25- <b>A</b> ug	Good	1,000	0	215,000	0	Shaul	600 sockeye in D lake; 400 sockeye in F lake. Pinks spawning up to very end of tributary.
283-62.05	Coal Bay	23-Jul	Good	0	0	1,300	0	Shaul	
	Major	31-Jul	Good	0	0	16,500	0	Shaul	10,000 pinks at mouth; strong showing ale beach.
		07-Aug	Good	0	0	65,000	0	Shaul	Surveyed to canyon; probably another 10-20,000 in the canyon.
		25-Aug	Good	0	0	42,000	0	Shaul	7,000 pinks at mouth. One boat. Fish spawning to the very end of the tributar.

Table 6. (page 14 of 24)

	Stream		_		Sr	ecies		-	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHCENTRA	L DISTRICT (Cont.)								
283-62.04	Coal Bay	31-Jul	Good	0	0	3,700	0	Shaul	2,000 pinks at mouth.
	•	07-Aug	Good	0	0	19,000	0	Shaul	Looks good.
		25-Aug	Good	0	0	24,000	0	Shaul	12,000 pinks at mouth. Pinks at mouth were not caught even though the fishery was ope
283-62.03	Coal Bay	25-Aug	Good	0	0	5,000	0	Shaul	1,000 pinks at mouth.
283-62.02	Coal Bay	Not	Surveyed						
283-62.01	Cape Tolstoi	Not	Surveyed						
283-63.16	Settlement Point	16-Jul	Good	0	0	1,800	. 0	Shaul	100 pinks at mouth; fair sign along beache All fish below forks.
		23-Jul	Good	0	0	11,000	0	Shaul	
		29-Jul	Good	0	0	72,000	0	Shaul	Surveyed main stem only; likely another
		31-Jul	Good	0	0	80,000	0	Shaul	5,000 in fork. 5,000 pinks at mouth, 4,000 in small fork, and 42,000 below forks. Only small schools along beach.
		07-Aug	Good	0	0	132,000	0	Shaul	14,000 in south fork; 81,000 below forks. Looks good.
		25-Aug	Good	0	0	104,000	0	Shaul	2,000 pinks and 2,000 chums at mouth. 30,0 pinks in south fork, and 31,000 below fork Fish at mouth were caught.
283-63.15	Middle	16-Jul	Good	0	0	900	0	Shaul	100 pinks at mouth.
	Creek	23-Jul	Good	0	0	2,700	0	Shaul	1
		29-Jul	Good	Ô	0	27,000	0	Shaul	
		31-Jul	Good	0	0	29,500	0	Shaul	1,500 pinks at mouth. 1,500 of the pinks were in the fork.
		07-Aug	Good	0	0	83,000	0	Shaul	16,000 pinks were in fork.
		25-Aug	Good	0	0	94,000	0	Shaul	Poor visibility at mouth.
283-64.10	Ness Creek	07-Aug	Good	0	0	200	0	Shaul	
		25-Aug	Good	0	0	1,200	0	Shaul.	200 pinks at mouth.
283-64.09	Inner Canoe Bay	07-Aug	Good	0	0	0	0	Shaul	200 chums at mouth.
		25 - Aug	Good	0	0	0	1,200	Shaul	1,100 chums at mouth.
283-64.08	Entrance Creek	31-Jul	Good	0	0	3,300	0	Shaul	1,000 pinks at mouth.
· -		07-Aug	Good	0	0	8,200	200	Shaul	300 chums at mouth.
		25-Aug	Good	0	0	20,500	300	Shaul	4,000 chums at mouth. 24,000 dark pinks along outer bay beach.

Table 6. (page 15 of 24)

	Stream		_		Spe	ecies		<u>.</u>	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHCENTRA	L DISTRICT (Cont.)								
283-64.07?	Wolverine Gulch	25-Aug	Good	0	0	4,500	0	Shaul	
283-64.06	Canoe Bay River	07-Jul 14-Jul	Good Fair	0	0	0	4,000 7,400	Berceli Shaul	3,000 along Inner Bay Flats. 700 chums at mouth. Saw only 500 in inner bay, may have been due to ripple
		16-Jul	Excellent	0	0	0	6,800	Shaul	on water, but no volume yet. 2,200 chums at mouth; 2,500 in inner
		23-Jul	Fair	1,600	0	0	14,000	Shaul	<pre>bay. 2,800 chums at mouth. Inner bay choppy but no sign of large numbers of fish.</pre>
		31-Jul	Good	4,000	0	0	20,000	Shaul	4,000 chums at mouth; additional 19,000 in inner bay.
		07-Aug	Good	3,000	0	0	40,000	Shaul	15,000 chums at mouth. 1,000 were in Fou Bear Creek. Additional 25,000 in Inner Bay, besides the 5,000 off Bluff Point
		25- <b>A</b> ug	Good	1,400	0	5,700	57,600	Shaul	Creek. Looks good. Many additional carcasses in main stream 5,200 pink and 1,600 chum carcasses in Four Bear Creek. Nothing seen at mouth or in inner bay. 24,000 dark pinks along outer bay beach.
283-64.05	Bluff Point Creek	07-Aug 25-Aug	Good Good	0	0	9,000 6,800	1,300 1,300	Shaul Shaul	5,000 chums at mouth. 1,000 chums at mouth. 24,000 dark pinks along outer bay beach.
283-63.14	Dry Lagoon	Not	Surveyed						
283-63.13	Ruby's Lagoon	03-Sep	Good	0	0	0	3,600	Shaul	6,000 chums in the lagoon.
283-63.11	Chinaman Lagoon-North	03-Sep	Good	0	0	0	0	Shaul	500 chums in the lagoon. Nothing in the creek.
283-63.10	Chinaman Lagoon Main	03-Sep	Good	0	0	0	1,000	Shaul	5,000 chums in mouth.
283-63.09	Chinaman Lagoon	Not	Surveyed						
283-63.06	Chinaman Lagoon South	Not	Surveyed						Included with 63.05.
283-63.05	Chinaman Lagoon	20-Aug	Good	6	0	0	1,000	Shaul	300 chums at mouth. Turbulent, count includes .06.
	Lower	03-Sep	Good	0	0	0	2,600	Shaul	2,500 chums in mouth. Counted 1,500 in .05 and 1,100 in .06.

Table 6. (page 16 of 24)

S	Stream		_		Spe	ecies		-	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHCENTRAI	L DISTRICT (Cont.)								
283-63.04	Chinaman Stream South	20-Aug 03-Sep	Fair Good	0 0	0 0	0	200 1,000	Shaul Shaul	Lower $1/4$ mile too muddy; 2,000 along the beach.
283-61.05	Long John Lagoon	Not	Suveyed						
283-61.04	Spring	07-Aug	Good	1,000	0	0	0	Shaul	900 chums in pothole, plus another 800 chums in lagoon.
	Fed Lakes	20-Aug 03-Sep	Good Good	900 400	0	0	500 300	Shaul Shaul	ovo chums in rayoon.
283-61.03	Long John Lagoon	03-Sep	Good	0	0	100	200	Shaul	
283-61.02	Southwest Stream	16-Aug 20-Aug	Good Good	0	0	900 1,100	1,200 3,000	Shaul Shaul	2,000 chums in pothole. Additional 1,000 chums in lagoon, and
		03-Sep	Good	. 0	0	2,000	2,000	Shaul	3,000 in pothole. Additional 2,000 chums in pothole.
SOUTHWESTERN	N DISTRICT								
284-52.10	Dushkin Lagoon	Not	Surveyed						
284-52.08	Volcano River	10-Aug 12-Aug 16-Aug	Good Good	0 0 0	0 0 0	200 0 200 0	300 0 1,700	Shaul Shaul Shaul	1,000 chums at mouth. Flats choppy. Surveyed flats only. 6,000 chums on fla Flats choppy.
		20-Aug 22-Aug	Good Good	0	0	300	1,700	Shaul Shaul	Surveyed lower 1/2 mile only. 3,000 chu at mouth. Nothing at mouth; minus tide.
		29-Aug 03-Sep 18-Sep	Good Good Good	0 0 0	0 0 0	500 1,300 0	2,000 2,500 10,500	Berceli Shaul Shaul	Nothing at mouth. 400 chums at mouth.
284-52.07	Volcano Center Sloughs	10-Aug 12-Aug 16-Aug 20-Aug 22-Aug	Good Good Good Good Excellent	0 0 0 0	0 0 0 0	0 0 800 300 1,600	0 0 200 2,300 700	Shaul Shaul Shaul Shaul Shaul	2,000 chums at mouth; nothing in slough Surveyed flats only; 10,000 chums on fl 4,500 salmon observed on flats. Choppy. 7,000 chums at mouth. 3,000 chums at mouth. Minus tide.
		29-Aug 03-Sep 18-Sep	Good Good Good	0	0	7,000 1,700 0	3,400 2,600 6,900	Berceli Shaul Shaul	1,000 chums at mouth. Plus 5,000 pinks 500 chums in slough. 9,000 chums at mouth. 4,000 chums at mouth.

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	Stream				Sp	ecies		•	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
OUTHWESTER	N DISTRICT (Cont.)								
284-52.06	West	10-Aug	Good	0	0	1,300	100	Shaul	1,000 chums at mouth.
32.00	Springholes	12-Aug	Good	Ö	0	0	0	Shaul	Surveyed flats only. 4,000 pinks and chums on flats.
		16-Aug	Good	0	0	2,700	200	Shaul	Flats choppy. Saw 1,000 salmon on flats
		20-Aug	Good	0	0	2,300	600	Shaul	2,000 chums at mouth.
		22-Aug	Excellent	0	0	2,400	200	Shaul	1,000 pinks at mouth. Minus tide.
		29-Aug	Good	0	0	1,550	300	Berceli	-
		03-Sep	Good	0	0	3,000	500	Shaul	1,000 chums at mouth.
		18-Sep	Good	0	0	1,000	1,000	Shaul	1,000 chums at mouth.
284-52.05	Streamguard	03-Sep	Good	0	0	100	200	Shaul	
	Creek	18-Sep	Good	0	0	0	600	Shaul	
284-52.04	Stub Creek	10-Aug	Good	0	0	0	0	Shaul	3,000 pinks at mouth.
		12-Aug	Good	0	0	0	0	Shaul	Surveyed mouth only. 9,000 pinks at mou
		16-Aug	Good	0	0	200	0	Shaul	2,500 pinks at mouth.
		20-Aug	Good	0	0	2,300	0	Shaul	Surveyed first 1/2 mile only.
		22-Aug	Good	0	0	1,600	0	Shaul	2,000 pinks at mouth.
		29-Aug	Good	0	0	2,200	0	Berceli	•
284-52.03	Little Bear Bay	10-Aug	Good	0	0	0	0	Shaul	Nothing in stream. 2,000 chums in NW corner; jumpers in outer part of inner bay.
		29-Aug	Fair	0	0	3,100	0	Berceli	Additional 5,000 at head of bay; difficuto ID species.
		03-Sep	Good	0	0	2,400	200	Shaul	4,000 chums in bay.
84-52.01	Nikolaski Spit	07-Aug	Good	0	0	4,700	0	Shaul	1,000 pinks at mouth.
	_	12-Aug	Good	0	0	4,600	0	Shaul	1,500 pinks at mouth. Goose survey.
		16-Aug	Good	0	0	8,000	0	Shaul	
		22-Aug	Good	0	0	11,600	0	Shaul	500 pinks at mouth.
		03-Sep	Good	0	0	8,400	0	Shaul	Surveyed lower 2/3 only. 300 pinks at mouth. Likely another 2,000 above.
884-51.03	Dolgoi Harbor North	03-Sep	Good	0	0	600	0	Shaul	
284-51.06	Dolgoi Harbor	07-Aug	Good	0	0	300	0	Shaul	3,000 pinks at mouth.
	Southwest	10-Aug	Good	0	0	700	0	Shaul	5,000 pinks at mouth.
		12-Aug	Good	0	0	1,000	0	Shaul	6,000 pinks at mouth. Goose survey.
		16-Aug	Good	0	0	3,000	0	Shaul	2,000 pinks at mouth.
		20-Aug	Good	0	0	4,000	0	Shaul	10,000 pinks at mouth.
		22-Aug	Good	0	0	4,400	0	Shaul	
		03-Sep	Good	0	0	3,700	0	Shaul	Surveyed lower 1/2 only. 2,000 pinks at mouth. Likely another 2,500 above.

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Stream				Species					
Number	Name/Location		Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHWESTER	RN DISTRICT (Cont.)								
284-51.05	Dolgoi Harbor South	Not	Surveyed						
284-41.01	Belkofski Village	31-Jul	Good	0	0	1,300	0	Shaul	1,000 pinks at mouth.
		07-Aug	Good	0	0	4,500	0	Shaul	
		10-Aug	Good	0	0	8,000	300	Shaul	1,500 pinks at mouth.
		12-Aug	Good	0	0	9,800	0	Shaul	3,000 pinks at mouth, Goose survey.
		16-Aug	Good	0	0	12,500	0	Shaul	4,000 pinks at mouth.
		22-Aug	Good	0	0	14,200	0	Shaul	1,000 pinks at mouth.
		03-Sep	Good	0	0	13,200	300	Shaul	Nothing at mouth.
284-42.12	Rocky River	31-Jul	Good	0	0	900	0	Shaul	4,000 pinks at mouth.
		07-Aug	Fair	0	0	6,000	0	Shaul	Surveyed below canyon only. 10,000 pinks at mouth. Turbulent.
		10-Aug	Good	0	0	11,000	0	Shaul	10,000 pinks at mouth.
		12-Aug	Good	0	0	10,000	0	Shaul	Surveyed below canyon only. 10,000 pinks
		<b>,</b>				,			at mouth. Probably 3-5,000 above canyon. Goose survey.
		16-Aug	Good	0	0	29,800	0	Shaul	5,000 pinks at mouth. Looks good.
		22-Aug	Good	ō	ō	0	ō	Shaul	Surveyed mouth only, 5,000 pinks at mouth
		03-Sep	Good	Ō	0	14,000	0	Shaul	1,000 pinks at mouth. Many additional carcasses.
284-42.10	Kitchen	10-Aug	Good	0	0	200	0	Shaul	2,000 pinks at mouth. Lots of jumpers alor
	Anchorage	_							southside of bay, but did not see any fish
	J	12-Aug	Good	0	0	0	0	Shaul	Surveyed mouth only. 5,000 pinks at mouth Nothing along beach.
		16 - Aug	Good	0	0	100	0	Shaul	3,000 pinks at mouth and 2,000 along beach
		20-Aug	Good	0	Ō	400	Ō	Shaul	look fresh. 7,000 pinks along beach at hea
		_							of bay, darkening. Two purse seiners.
		22-Aug	Good	0	0	250	0	Shaul	11,000 pinks at mouth; additional 2,000 along the beach.
		03-Sep	Good	0	0	4,700	0	Shaul	10,000 pinks at mouth; Plus 300 along uppobeach.
284-42.09	Captain's Harbor	10-Aug	Good	0	0	0	0	Shaul	Nothing in creek and very little sign in harbor.
		16-Aug	Good	0	0	700	0	Shaul	
		20-Aug	Good	0	Ō	0	Ō	Shaul	Surveyed harbor only, 11,000 chums at mout
		29-Aug	Good	0	0	2,500	ő	Berceli	Surveyed harbor only. 10,000 chums at mout Chums at head of bay noted in 42.07.
		03-Sep	Good	0	0	3,000	300	Shaul	1,500 chums at mouth; plus 5,000 chums in harbor.

Table 6. (page 19 of 24)

Stream				Species					
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
OUTHWESTER	V DISTRICT (Cont.)								
284-42.07	Belkofski Bay River	10-Aug	Fair	0	О	2,200	300	Shaul	Surveyed above glacial tributary only; too muddy below.
		16-Aug	Good	0	. 0	1,200	3,100	Shaul	4,000 chums at mouth. Plus 11,000 chums i Captain's Harbor.
		29-Aug	Good	0	0	2,000	2,700	Berceli	500 chums at mouth. Plus 10,000 chums in Captain's Harbor.
		03-Sep	Good	0	0	1,400	18,500	Shaul	500 chums at mouth. Plus 5,000 chums in Captain's Harbor.
284-42.06	Belkofski	10-Aug	Good	0	0	600	0	Shaul	
	Bay Beach	16-Aug	Good	0	0	1,400	0	Shaul	
	•	29-Aug	Good	0	0	3,700	0	Berceli	600 pinks at mouth.
		03-Sep	Good	0	0	2,500	0	Shaul	500 pinks at mouth.
284-42.05	Belkofski	10-Aug	Good	0	0	7,200	0	Shaul	
	Bay West	16-Aug	Good	0	0	12,000	Ō	Shaul	Doesn't appear to be much at mouth or ald beach.
		29-Aug	Good	0	0	7,100	0	Berceli	2000.
284-42.03	Indian Head	10-Aug	Good	0	0	0	0	Shaul	1,000 pinks at mouth. None in creek; seventhousand along the beach.
		16-Aug	Good	0	0	1,000	0	Shaul	1,500 pinks at mouth; 1,000 along the bealook fresh.
		22-Aug	Good	0	0	1,000	0	Shaul	500 pinks at mouth.
		03-Sep	Good	0	0	3,100	0	Shaul	Surveyed lower 2/3 only, probably another 2,000 above. Plus 1,000 pinks along beach west of Indian Head.
84-33.05	Ram's Creek	12-Aug	Good	0	0	3,100	0	Shaul	3,000 pinks at mouth, and 1,700 above the
		16-Aug	Good	0	0	8,500	0	Shaul	3,000 pinks at mouth. About 1/2 above culvert.
		22-Aug	Good	0	0	11,300	0	Shaul	1,000 pinks at mouth. 6,300 above culvert.
		03-Sep	Good	0	0	17,200	0	Shaul	1,000 pinks at mouth. 8,200 above culvert, plus many additional carcasses.
84-33.04	King Cove Lagoon	03-Sep	Good	0	0	0	800	Shaul	500 chums at mouth, plus 1,500 chums along east side of lagoon. 1/2 of fish in stream were carcasses.
84-33.03	King Cove	03-Sep	Good	0	0	0	200	Shaul	

Table 6. (page 20 of 24)

Stream			_	Species				_	
Number	Name/Location		Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks <sup>a,b</sup>
SOUTHWESTER	RN DISTRICT (Cont.)								
284-31.01	Fox Island Anchorage East	27-Jul	Poor	0	0	700	0	Shaul	Count low due to poor light, high water, and fresh condition of fish.
	3	31-Jul	Good	0	0	3,800	0	Shaul	500 pinks at mouth.
		07-Aug	Good	0	0	32,000	Ó	Shaul	12,000 pinks at mouth. Looks great.
		25-Aug	Good	0	0	69,000	0	Shaul	2,000 pinks at mouth. Loaded.
284-31.02	Fox Island	31-Jul	Good	0	0	700	0	Shaul	300 pinks at mouth.
	Anchorage Center	07-Aug	Good	0	0	2,800	0	Shaul	5,000 pinks at mouth.
		25-Aug	Good	0	0	4,300	0	Shaul	•
284-31.03	Fox Island Anchorage West	27-Jul	Fair	0	0	8,100	0	Shaul	Surveyed lower 2 miles only. 2,000 pink at mouth. Had to turn back due to fog; likely another 1,000 above.
		31-Jul	Good	0	0	14,400	0	Shaul	2,000 pinks at mouth.
		07-Aug	Good	0	0	46,000	0	Shaul	Loaded.
		25-Aug	Good	0	0	26,000	0	Shaul	1,000 pinks at mouth. Still loaded.
284-31.05	Paw Cape Creek	31-Jul	Good	0	0	2,100	0	Shaul	
		07-Aug	Good	0	0	5,200	0	Shaul	
		25-Aug	Good	0	0	24,500	0	Shaul	Full.
284-31.06	Southern Creek	16-Jul	Good	0	0	4,100	0	Shaul	2,000 pinks were below the first bend.
		27-Jul	Good	0	0	31,200	0	Shaul	Good showing in lower end.
		31-Jul	Good	0	0	42,400	0	Shaul	500 pinks at mouth.
		07-Aug	Poor	0	0	113,000	0	Shaul	Surveyed up to canyon, probably another 30-50,000 above. Turbulent.
		25- <b>A</b> ug	Good	0	0	206,000	0	Shaul	Loaded.
284-31.10	Eastern Creek	16-Jul	Good	0	0	0	0	Shaul	400 pinks at mouth. Nothing in creek.
		27-Jul	Good	0	0	10,000	0	Shaul	2,500 pinks at mouth.
		31-Jul	Good	0	0	12,000	0	Shaul	2,000 pinks at mouth.
		07-Aug	Good	0	0	21,000	0	Shaul	Good escapement. Turbulent.
		25-Aug	Good	0	0	14,000	0	Shaul	500 pinks at mouth; many additional carcasses.
284-34.11	Lenard Harbor	09-Auq	Good	0	0	1,300	0	Shaul	2,000 pinks at mouth.
	South	29-Aug	Fair	0	Ō	2,000	ő	Berceli	Flat light.
284-34.10	Lenard Harbor	09 - Aug	Good	6	0	0	700	Shaul	Nothing seen on flats.
	Main	16-Aug	Good	0	0	400	3,100	Shaul	1,200 chums on flats.
	(Delta Creek)	20-Aug	Good	Ō	Ō	700	3,400	Shaul	Flats choppy.
		03-Sep	Good	0	ō	3,300	5,300	Shaul	Nothing on flats.

Table 6. (page 21 of 24)

	Stream				Sp	ecies		-	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*.b
SOUTHWESTER	N DISTRICT (Cont.)								
284-34.09	Barney's Creek	09-Aug	Good	0	0	13,000	0	Shaul	10,000 pinks at mouth; plus 40,000 along beach.
		29-Aug	Good	0	0	9,500	3,000	Berceli	Several thousand chum carcasses in springs.
284-34.07	Kinzarof Lagoon	29-Aug	Good	200	0	0	0	Berceli	
284-34.06	Kinzarof Lagoon	29-Aug	Good	300	0	0	0	Berceli	
284-34.05	Kinzarof Lagoon	Not	Surveyed						
284-34,03	Trout Creek	29-Aug	Good	40	0	0	60	Berceli	Additional 50 chum carcasses.
		23-Sep	Good	0	10	0	0	Shaul	Surveyed lower 2 miles only; likely missed fish above.
		01-Oct	Excellent	0	350	0	0	Shaul	Nearly all fish were between culvert and next forks upstream.
284-34.02	Russel Creek	14-Jul	Good	0	0	0	400	Shaul	All in lower 1/2 mile.
		09-Aug	Good	0	0	0	28,500	Shaul	5,000 chums were above the hatchery. Good sign at mouth.
		20-Aug	Excellent	0	0	700	35,500	Shaul	600 pinks and 6,500 chums were above the hatchery.
		30-Aug	Good	450	0	5,200	69,500	Shaul	200 pinks and 26,200 chums were above the hatchery. 300 chums in Nurse Lagoon
		23-Sep	Good	0	500	0	13,000	Shaul	5,000 chums were above the hatchery. Coho count likely low.
		01-0ct	Good	0	2,400	0	0	Shaul	600 coho were above the hatchery; very few below hatchery.
284-34.01	Mortensen Lagoon	10-Aug	Good	500	0	0	0	Shaul	Survey of creek. 3,000 sockeye at mouth Phytoplankton bloom on lake.
		29-Aug	Good	2,200	0	0	0	Berceli	All on spawning grounds.
		03-Sep	Good	4,000	0	0	0	Shaul	Survey of creek. 800 sockeye at mouth. 2,900 were spawning and 1,000 were schooled just above mouth.
		06-Sep	Good	0	0	0	0	Shaul	Survey of lake. 900 off creek mouth.
		18-Sep	Good	3,000	500	0	0	Shaul	Survey of lake and creek. 100 sockeye at mouth 2,300 sockeye spawning in creek, and 600 spawning along lake shore
284-32.01	Old Man's Lagoon	23-Jul	Good	0	0	0	50	Shaul	Just above creek mouth.
		01-Aug	Good	0	0	0	500	Berceli	Well distributed.
		09-Aug 29-Aug	Good Good	10 0	0	0	750 400	Shaul Berceli	250 chums at mouth. 150 chums carcasses.

Table 6. (page 22 of 24)

	Stream		_		Sp	ecies		_	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHWESTER	N DISTRICT (Cont.)								
284-20.06	Thinpoint Lagoon	06-Jul	Good	0	0	0	0	Shaul	Nothing. Low tide , fish may have backed out.
	Entrance Channel	14-Jul 27-Jul	Good Poor	3,000 6,500	0	0	0	Shaul Shaul	1,200 were in the upper end. Could only count in upper end; murky water. Probably at least twice as many. Fish moving up to lake.
		01-Aug	Good	9,000	0	0	0	Berceli	1/3 in upper lagoon; 2/3 in outlet channel.
		09-Aug	Fair	7,500	0	0	0	Shaul	Several hundred carcasses on flats, and in N-S channels. Fair visibility in uppoend, poor below.
		16-Aug	Fair	7,400	0	0	0	Shaul	Most old looking, some colored. Fair visibility in upper end, poor below.
		20-Aug	Good	3,300	0	0	0	Shaul	Fish look fresher.
		22-Aug	Good	5,600	0	0	0	Shaul	1,500 in lower end; some are coho.
		03-Sep	Fair	0	3,200	0	0	Shaul	2,100 in upper portion; some are likely sockeye. Count low in lower portion due to high tide.
		07-Sep	Good	0	2,000	0	0	Shaul	Cherokee survey.
284-20.08	Thinpoint West	03-Sep	Good	400	0	0	0	Shaul	
284-20.09	Thinpoint Lake Stream	03-Sep	Good	2,000	0	0	0	Shaul	500 sockeye at mouth.
284-20.10	Thinpoint Lake	03-Sep	Good	2,600	0	0	0	Shaul	
284-20.04	Southwest Bight	27-Jul	Good	0	0	100	0	Shaul	
		01-Aug	Good	0	0	180	0	Berceli	
		07-Aug	Good	0	0	1,600	0	Shaul	2 2 2 1 1
		09-Aug 22-Aug	Good Good	0	0 0	2,900 5,100	0 0	Shaul Shaul	2,000 along beach
284-20.03	McGinty's Creek	27-Jul	Good	0	0	300	0	Shaul	
		01-Aug	Good	0	0	100	0	Berceli	100 pinks at mouth.
		07-Aug	Good	0	0	14,000	0	Shaul	
		09-Aug 22-Aug	Good Good	0 0	0	23,000 24,000	0 0	Shaul Shaul	10,000 pinks in corner of cove. 1,000 pinks at mouth.
284-20.01	Sandy Cove	27-Jul	Good	0	0	100	0	Shaul	
	Stream	01-Aug 09-Aug	Good Good	0 0	0 0	200 300	300 2,200	Berceli Shaul	100 pinks at mouth. Just entering stream 2,000 chums at mouth; another 3-4,000
		22-Aug	Excellent	0	0	1,400	12,300	Shaul	along beach. 100 chums at mouth; another 300 along beach.
		07-Sep	Good	0	0	1,000	22,000	Shaul	Good chum escapement.
		23-Sep	Good	0	Ō	0	10,000	Berceli	Good show in springs; still in river.

Table 6. (page 23 of 24)

S	Stream		_		Sp	ecies		_	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks <sup>a,b</sup>
SOUTHWESTERN	DISTRICT (Cont.)								
284-11.01	Near Egg	01-Aug	Good	0	0	560	0	Berceli	
	Island Stream	09-Aug	Good	0	0	2,000	900	Shaul	
		22-Aug	Good	0	0	3,500	500	Shaul	50 chums at mouth.
		07-Sep	Good	0	0	600	700	Shaul	
284-12.13	Little John Lagoon	01-Aug	Fair	0	0	250	300	Berceli	50 chums at mouth. Lagoon choppy, visibility marginal however saw several seals.
		10-Aug	Good	0	0	100	200	Shaul	100 chums inside spit; nothing on flats. Several seals.
		22-Aug	Good	0	0	1,200	2,000	Shaul	4,000 chums at mouth; additional 500 chums in lower end of lagoon.
		07-Sep	Good	0	0	0	6,500	Shaul	500 chums at mouth; saw nothing in lagoon.
284-12.12	Little John	22-Aug	Good	0	0	0	0	Shaul	Surveyed mouth only. 200 chums at mouth.
	Sand Spit	07-Sep	Good	Ō	0	0	20	Shaul	50 chums at mouth.
284-12.11	Cannery Creek	07-Sep	Good	0	0	500	0	Shaul	
284-12.05	Middle Lagoon	06-Jul	Excellent	100	0	0	0	Shaul	Survey of lagoon.
		22-Jul	Poor	400	0	0	0	Shaul	Survey of lagoon. Count low; tide high. No jumpers in pothole.
		01-Aug	Poor	3,000	0	0	0	Berceli	Difficult to see; flooding tide in lagoon. Jumpers in pothole.
		09-Aug	Good	1,400	0	0	0	Shaul	Fish in lower end.
		10-Aug	Good	2,000	0	0	0	Shaul	High altitude flyover of lower 1/4 mile.
		22-Aug	Good	400	0	0	0	Shaul	In lower end; may have been some coho.
		30-Aug	Good	1,400	Ō	Ō	0	Shaul	Survey of lake and outlet, 100 in outlet. All fish spawning.
		03-Sep	Good	3,100	0	0	0	Shaul	Survey of lake and outlet, 100 in outlet.
		15-Sep	Fair	13,700	0	Ō	0	Shaul	Survey of lake and outlet. 700 in outlet. Could only see at shoreline; lake was like a green soup.
		01-Oct	Good	8,700	0	0	0	Shaul	400 were spawning in outlet.
284-12.01	Hansen's Creek	10-Aug	Good	230	0	1,000	0	Shaul	500 pinks at mouth. 50% of sockeye were spawning.
		22-Aug	Good	170	0	5,000	0	Shaul	spawning. 300 pinks at mouth. May have been more sockeye on east side of lake.
284-60.08	Deadman's Cove	10-Aug	Good	900	. 0	5,000	0	Shaul	300 pinks at mouth. 800 sockeye in lake; 100 sockeye schooled in upper end of canyo
		22-Aug	Good	1,500	0	6,500	0	Shaul	100 bookeye behooted in appet that of early
284-60.07	Whalebone Bay	10-Aug	Good	120	0	100	0	Shaul	Pinks below log jam. Sockeye in spawning creek. Could not see any fish in lake.
		07-Sep	Good	0	0	0	0	Shaul	Nothing but a few carcasses.

Table 6. (page 24 of 24)

	Stream				Sp	ecies		<del>.</del>	
Number	Name/Location	Date	Survey Conditions	Sockeye	Coho	Pink	Chum	Observer	Remarks*,b
SOUTHWESTER	N DISTRICT (Cont.)								
284-60.06	Sankin Bay	10-Aug 07-Sep	Good Good	0	0	400 500	100	Shaul Shaul	
284-60.05	Whirl Point	10-Aug 28-Aug	Good Good	0	0	0 6,300	0	Shaul Shaul	500 pinks at mouth. Nothing in creek.
284-60.04	Ikatan River	28-Aug	Fair	0	0	6,700	600	Shaul	Surveyed clear tributary only; poor ligh
284-60.03	Swede's Lake	10-Aug 28-Aug	Good Fair	180 40	0 0	100 100	0 0	Shaul Shaul	200 pinks at mouth. 80 sockeye spawning. 50 pinks at mouth. Poor light.
284-60.01	Ikatan Point (Salmon Ranch)	10-Aug 28-Aug	Good Good	0 0	0 0	800 1,900	0 0	Shaul Shaul	
UNIMAK DIST	TRICT								
285-50.00	Dora Harbor Left	Not	Surveyed						
285-40.09	Otter Cove North	10-Aug 28-Aug	Good Good	0 0	0 0	300 2,000	100	Shaul Shaul	
285-40.08	Otter Cove South	10-Aug 28-Aug	Good Poor	0	0	100 400	400 100	Shaul Shaul	Poor light.
285-40.05	Lazaref River	Not	Surveyed						
285-10.65	Sanak Village	Not	Surveyed						
285-10.70	Sanak Island W.	Not	Surveyed						
285-10.80	Washwomen Creek	Not	Surveyed						
285-10.??	Dodd's Bay E.	Not	Surveyed						
285-10.90	Sandy Bay	Not	Surveyed						
285-10.10	Salmon Bay	Not	Surveyed						·

All fish listed as being at the stream mouth, etc., are additional to those in stream unless otherwise noted in remarks. ADF&G super cub was used for surveys unless otherwise noted in remarks. See Orzinski weir counts and escapement.

Table 7. Peak and total estimated salmon escapement by district, species, and stream for the South Peninsula, 1993.

	_					Species			
Stre			keye	Co		Pink		Ch	
Number	Name/Location	Peak	Total	Peak	Total	Peak	Total	Peak	Total
SOUTHEASTER	N DISTRICT								
281-35.07	Bluff Point	0	0	0	0	400	0	0	0
281-35.06	Boulder Bay	0	0	0	0	600	1,165	100	165
281-35.05	Fox Bay	0	0	0	0	2,600	3,893	0	0
281-35.04	Fox Bay	0	0	0	0	450	707	50	67
281-35.02	Fox Bay	0	0	0	0	11,500	22,133	0	0
	of 281-35.02 dentified as	0	0	0	0	0	2,000	0	0
281-34.08	Island Bay	0	0	0	0	1,200	2,447	0	0
Not numbere Stream sout	ed. Unnamed h of 281-34.08	0	0	0	0	0	50	0	0
281-34.07	Island Bay	0	0	0	0	3,000	4,450	0	0
281-34.06	Island Bay	0	0	0	0	8,000	11,707	0	0
281-34.05	Island Bay	0	0	0	0	3,500	5,387	0	0
281-34.04	Unnamed	0	0	0	0	2,300	3,493	0	0
281-34.03	Stonehouse	0	0	0	0	33,000	48,540	0	0
281-34.02	Osterback	0	0	0	0	30,000	42,170	0	0
281-34.01	Granville- Portage Inlet	0	0	0	0	1,500	2,000	500	883
281-33.06	Stepovak Flats	0	0	0	0	250	333	100	330
281-33.05	Stepovak River	0	0	0	0	15,000	31,500	2,000	4,800
281-33.04	Big River	0	0	0	0	12,000	19,600	1,500	4,380
281-33.03	Louie's Corner	0	0	0	0	15,000	41,747	3,000	6,600
281-33.02	Ramsey Bay	0	0	0	0	2,500	5,607	500	944
281-33.01	Ramsey Bay	0	0	0	0	1,000	2,100	250	600
281-32.07	Grub Gulch	0	0	0	0	35,000	76,087	400	1,108
281-32.06	Clark Bay Stream	Not	Surveyed	ì					
281-32.05	Clark Bay	0	0	0	0	23,000	30,632	250	417
281-32.04	Little Norway	0	0	0	0	14,000	28,473	1,500	3,500
281-31.03	Orzinski Lake and Stream			0	0	28,000	72,549	300	300
281-31.03	Orzinski Lake Weir <sup>a</sup>	0	24,717						
281-20.04	Windbound Bay	0	O	0	0	1,600	3,308	0	0
281-20.03	Chichagof, East	Not	Surveyed	i					
281-20.02	Chichagof	0	0	0	0	14,000	26,567	500	667
281-20.01	Chichagof Bay Stream	0	0	0	0	5,000	12,016	0	0

Table 7. (page 2 of 7)

	<del>-</del>				S	Species			
Stre	eam	Soci	ceve	Col	10	Pink		Chi	ım
Number	Name/Location	Peak	Total	Peak	Total	Peak	Total	Peak	Total
SOUTHEASTER	RN DISTRICT (Cont.)	• • • • • • • • • • • • • • • • • • • •							
281-10.04	West Cove	0	0	0	0	3,100	4,133	0	(
281-10.03	Suzy's Creek	0	0	0	0	68,000	108,913	0	(
281-10.02	Dorenoi Bay (minor stream)	0	0	0	0	4,500	13,947	0	C
281-10.01	Dorenoi Bay Stream	0	0	0	0	19,000	19,000	0	C
281-90.04	San Diego Bay	0	0	0	0	11,000	23,533	800	1,946
281-90.04	San Diego Lagoon	0	0	0	0	5,000	5,000	50	300
281-90.03	San Diego Bay West Side	0	0	0	0	100	210	0	C
281-90.02	Rough Beach Creek	0	0	0	0	32,000	42,970	0	(
281-90.01	Swedania Point Creek	0	0	0	0	36,000	83,113	0	C
281-80.16	Ballast Island	0	. 0	0	0	50	67	0	C
281-80.15	Coleman Creek	0	0	0	0	45,000	67,740	1,000	1,943
281-80.14	Johnson Creek	0	0	0	0	7,500	25,203	400	2,020
281-80.12	Foster's Camp (Bassett)	0	0	0	0	3,500	6,282	,0	C
281-80.11	Monolith Point Creek	0	0	0	0	5,500	8,093	0	C
281-80.09	Foster Creek	0	0	0	0	38,000	59,326	1,000	1,000
281-80.08	Lefthand Bay	0	0	0	0	17,000	31,317	500	983
281-80.06	Cape Aliaksin	0	0	0	0	28,000	28,000	0	(
281-80.05	Cape Aliaksin	0	0	0	0	9,500	27,795	0	(
281-80.04	Cape Aliaksin	0	0	0	0	17,500	29,447	0	. (
281-70.06	Kagayan Flats	Not	Surveyed	ì					
281-70.05	Beaver River	0	0	0	0	18,300	28,636	6,000	6,245
281-70.04	Smiley Creek	0	0	0	0	30,000	40,738	0	C
282-13.01	Unga Spit	Not	Surveyed	ì					
282-13.02	Dry Lagoon	0	0	0	0	37,000	56,726	250	272
282-13.03	Bay Point	0	0	0	0	46,700	69,423	500	500
282-13.04	Pinnacle Point	0	0	0	0	4,300	2,746	0	(
282-13.05	Unnamed	0	0	0	0	150	200	0	(
282-13.06	Unnamed	0	0	0	0	50	67	0	(
282-10.02	Apollo Creek Minor	0	0	0	0	15,200	29,335	0	(
282-10.03	Apollo Creek	0	0	0	0	12,500	22,436	0	(
282-10.04	Acheredin Lake	1,200	1,500	0	0	0	0	0	(
282-10.06	Unnamed	Not	Surveyed	i					
282-10.10	Unnamed	0	0	0	0	25	53	0	(

Table 7. (page 3 of 7)

<b>a</b> .					S	pecies			
Str	eam	Soc	keye	Çoh	10	Pin	k_	Ch	um
Number	Name/Location	Peak	Total	Peak	Total	Peak	Total	Peak	Total
SOUTHEASTE	RN DISTRICT (Cont.)								
282-10.11	Apollo Gold Mine (Delarof Harbor)	0	0	0	0	15,500	26,603	0	ı
282-10.12	Unga Cape Stream	0	0	0	0	300	630	0	,
282-10.13	Baralof Bay	125	156	360	864	125	300	0	
282-10.14	Squaw Harbor Minor	0	0	0	0	9,000	16,460	0	ı
282-10.15	Squaw Harbor Major	0	0	0	0	42,500	89,033	20	4
282-10.16	Ben Green Bight Farm	0	0	0	0	8,500	17,520	0	•
282-10.17	NE Unga I.	Not	Surveyed						
282-12.10	No Name	0	0	0	0	0	0	6	1
282-12.09	South Quartz Point	. 0	0	0	0	300	400	0	ı
282-12.08	South Quartz Point	0	0	0	0	500	547	0	1
282-12.07	Zachary Bay	0	0	0	. 0	700	850	0	
282-12.06	Zachary Bay	0	0	0	0	300	467	0	ı
282-12.05	Zachary Bay	0	0	0	0	2,800	5,400	400	40
282-12.04	Zachary Bay	0	0	0	0	800	1,067	0	•
282-12.03	Zachary Bay	0	0	0	0	400	600	200	20
282-12.02	Zachary Bay	0	0	0	0	0	0	0	1
282-12.01	Zachary Bay Coal Harbor West	0	0	0	0	0	0	0	ı
282-10.18	Humbolt Creek	0	0	110	264	500	1,050	0	
282-11.01	Salmon Ranch	0	0	0	0	450	559	0	•
282-11.03	Fox Hole (Little Harbor)	0	0	O	0	2,200	2,968	0	•
282-11.06	Korovin Island	50	0	0	0	0	0	0	
282-20.00	Sanborn Harbor	Not	Surveyed						
282-20.03	Sanborn Harbor	Not	Surveyed						
282-20.04	Sanborn Harbor	Not	Surveyed						
282-20.05	Falmouth Harbor	Not	Surveyed						
Southeaste	rn District Total	1,375	26,373	470	1,128	863,750	1,499,563	22,076	40,63
SOUTHCENTR	AL DISTRICT								
283-70.03	McGinty Point	0	0	0	0	51,000	72,105	0	i
283-70.02	East of Mino	0	0	0	0	76,500	193,538	0	•
283-70.01	Mino Creek	1,000	1,250	0		215,000	687,667	1,000	1,00
283-62.05	Coal Bay Major	0	0	0	0	65,000	109,007	0	i

Table 7. (page 4 of 7)

Stro	- m				S	pecies			
Stre			ceye	Coho		Pink		Ch	
Number	Name/Location	Peak	Total	Peak T	otal	Peak	Total	Peak	Total
SOUTHCENTRA	L DISTRICT (Cont.)								
283-62.04	Coal Bay Minor	0	0	0	0	24,000	62,611	0	0
283-62.03	Coal Bay Middle	0	0	0	0	5,000	10,500	0	0
283-62.02	Coal Bay	Not	Surveyed						
283-62.01	Cape Tolstoi	Not	Surveyed						
283-63.16	Settlement Point	0	0	0	0	132,000	272,869	0	0
283-63.15	Middle Creek	0	0	0	0	94,000	286,203	0	0
283-64.10	Ness Creek	0	0	0	0	1,200	1,728	0	0
283-64.09	Inner Canoe Bay	0	0	0	0	0	0	1,200	1,440
283-64.08	Entrance Creek	0	0	0	0	20,500	40,844	300	693
283-64.07?	Wolverine Gulch	0	0	0	0	4,500	9,450	0	0
283-64.06	Canoe Bay River	4,000	8,000	0	0	5,700	6,840	57,600	182,369
283-64.05	Bluff Point Creek	0	0	0	0	9,000	17,380	1,300	4,420
283-63.14	Dry Lagoon	Not	Surveyed						
283-63.13	Ruby's Lagoon	0	0	0	0	0	0	3,600	8,640
283-63.11	Chinaman Lagoon-North	0	0	0	0	0	0	0	0
283-63.10	Chinaman Lagoon Main	0	0	0	0	0	0	1,000	2,400
283-63.09	Chinaman Lagoon	Not	Surveyed						
283-63.06	Chinaman Lagoon South	Not	Surveyed						
283-63.05	Chinaman Lagoon Lower	6		0	0	0	0	2,600	3,943
283-63.04	Chinaman Stream South	0	0	0	0	0	0	1,000	1,167
283-61.05	Long John Lagoon	Not	Surveyed						
283-61.04	Spring Fed Lakes	1,000	2,000	0	0	0	0	500	740
283-61.03	Long John Lagoon	0	0	0	0	100	210	200	480
283-61.02	Southwest Stream	0	0	0	0	2,000	4,327	3,000	4,000
South Centr	al District Total	6,006	11,250	0	0	705,500	1,775,279	73,300	211,293
SOUTHWESTER	N DISTRICT	.,							
284-52.10	Dushkin Lagoon	Not	Surveyed						
284-52.08	Volcano River	0	0	0	0	1,300	1,417	10,500	18,412
284-52.07	Volcano Center Sloughs	0	0	0	0	7,000	7,000	6,900	14,533
284-52.06	West Springholes	0	0	0	0	3,000	5,951	1,000	2,480
284-52.05	Streamguard Creek	0	0	0	0	100	100	600	900
284-52.04	Stub Creek	0	0	0	0	2,300	2,620	0	0

Table 7. (page 5 of 7)

Stre	-am				S	pecies			
Number	Name/Location	Sock Peak	eye Total	Col Peak	Total	Pink Peak	Total	Ch Peak	um Total
SOUTHWESTER	N DISTRICT (Cont.)		·						
284-52.03	Little Bear Bay	0	a	0	0	3,100	4,080	200	200
284-52.01	Nikolaski Spit	0	0	0	0	11,600	23,500	0	0
284-51.03	Dolgoi Harbor North	0	0	0	0	600	1,260	. 0	0
284~51.06	Dolgoi Harbor Southwest	0	0	0	0	5,200	12,205	0	0
284-51.05	Dolgoi Harbor South	Not	Surveyed						
284-41.01	Belkofski Village	0	0	٥	0	14,200	29,787	300	300
284-42.12	Rocky River	0	0	0	0	29,800	45,437	0	0
284-42.10	Kitchen Anchorage	0	0	0	0	4,700	4,700	0	0
284-42.09	Captain's Harbor	0	0	0	0	3,000	4,887	300	300
284-42.07	Belkofski Bay River	0	0	0	0	2,000	3,098	18,500	18,500
284-42.06	Belkofski Bay Beach	0	0	0	0	3,700	4,601	0	0
284-42.05	Belkofski Bay West	0	0	0	0	12,000	17,827	0	0
284-42.03	Indian Head	0	0	0	0	5,100	6,080	0	0
284-33.05	Ram's Creek	0	0	0	0	17,200	34,288	0	0
284-33.04	King Cove Lagoon	0	0	0	0	0	0	800	1,920
284-33.03	King Cove	0	0	. 0	0	0	0	200	480
284-31.01	Fox Island Anchorage East	0	0	0	0	69,000	138,160	0	0
284-31.02	Fox Island Anchorage Center	0	0	0	0	4,300	10,262	0	0
284-31.03	Fox Island Anchorage West	0	0	0	0	46,000	71,824	0	0
284-31.05	Paw Cape Creek	0	0	0	0	24,500	39,711	0	0
284-31.06	Southern Creek	0	0	0	0	206,000	459,968	0	0
284-31.10	Eastern Creek	0	0	0	0	21,000	42,300	0	0
284-34.11	Lenard Harbor Sout (Delta Creek)	h 0	0	0	0	2,000	5,700	0	0
284-34.10	Lenard Harbor Main	6	12	0	0	3,300	4,213	5,300	21,987
284-34.09	Barney's Creek	0		0	0	13,000	26,250	3,000	4,000
284-34.07	Kinzarof Lagoon	200	400	0	0	0	0	0	0
284-34.06	Kinzarof Lagoon	300	600	0	0	0	0	0	0
284-34.05	Kinzarof Lagoon	Not	Surveyed						
284-34.03	Trout Creek	40	80	350	840	0	0	60	80
284-34.02	Russel Creek	450	900	2,400	5,760	5,200	6,383	69,500	152,993

Table 7. (page 6 of 7)

Stre	eam				S	pecies			
Number	Name/Location	Soci Peak	ceye Total	Co. Peak	ho Total	Pink Peak	Total	Peak	um Total
SOUTHWESTER	N DISTRICT (Cont.)		-						
284-34.01	Mortensen Lagoon	4,000	8,000	500	1,200	0	0	0	C
284-32.01	Old Man's Lagoon	10	20	0	0	0	0	750	1,467
284-20.06	Thinpoint Lagoon Entrance Channel	9,000	18,000	3,200	7,680	0	0	0	0
284-20.08	Thinpoint West	400	800	0	0	0	0	0	0
284-20.09	Thinpoint Lake Stream	2,000	4,000	0	0	0	0	0	0
284-20.10	Thinpoint Lake	2,600	5,200	0	0	0	0	0	0
284-20.04	Southwest Bight	0	0	0	0	5,100	8,380	0	0
284-20.03	McGinty's Creek	0	0	0	0	24,000	51,740	0	0
284-20.01	Sandy Cove Stream	0	0	0	. 0	1,400	2,750	22,000	46,804
284-11.01	Near Egg Island Stream	0	0	0	0	3,500	5,377	900	1,837
284-12.13	Little John Lagoon	0	0	0	σ	1,200	1,390	6,500	11,427
284-12.12	Little John Sand Spit	0	0	0	0	0	0	20	48
284-12.11	Cannery Creek	0	0	0	0	500	1,050	0	0
284-12.05	Middle Lagoon	13,700	27,400	0	0	0	0	0	0
284-12.01	Hansen's Creek	230	460	0	0	5,000	5,000	0	0
284-60.08	Deadman's Cove	1,500	3,000	0	0	6,500	14,200	0	o
284-60.07	Whalebone Bay	120	240	0	0	100	143	0	0
284-60.06	Sankin Bay	0	. 0	0	0	500	2,080	100	143
284-60.05	Whirl Point	0	0	0	0	6,300	7,560	0	0
284-60.04	Ikatan River	0	0	0	0	6,700	14,070	600	1,440
284-60.03	Swede's Lake	180	360	0	0	100	210	0	0
284-60.01	Ikatan Point (Salmon Ranch)	0	0	0	0	1,900	3,938	0	0
Southwester	n District Total	34,736	69,472	6,450	15,480	583,000	1,131,498	148,030	300,251
UNIMAK DIST	TRICT	-							
285-50.00	Dora Harbor Left	Not	Surveye	đ					
285-40.09	Otter Cove North	0	0	0	0	2,000	2,824	100	110
285-40.08	Otter Cove South	0	0	0	0	100	210	400	960
285-40.05	Lazaref River	Not	Surveye	i					
285-10.65	Sanak Village	Not	Surveye	i					
285-10.70	Sanak Island W.	Not	Surveye	d					
285-10.80	Washwomen Creek	Not	Surveye	d					
285-10.??	Dodd's Bay E.	Not	Surveye	4					

Table 7. (page 7 of 7)

Ob.,,,,,,,,,		Species										
Stream Number	Name/Location	Soc Peak	keye Total	<u>Co</u> Peak		Pink Peak	Total	. Ch	num Total			
UNIMAK DISTRIC	T (Cont.)						- · · · · ·					
285-10.90	Sandy Bay	Not	Surveyed	i								
285-10.10	Salmon Bay	Not	Surveyed	i								
Unimak Distric	t Total	0	0	0	0	2,100	3,034	500	1,070			
South Peninsul	a Total	42,117	107,095	6,920	16,608	2,154,350	4,409,373	243,906	553,246			

<sup>&</sup>lt;sup>a</sup> The Orzinski (Orzenoi) Lake weir count is included in the total escapement, however it does not include a peak count.

A fifteen day average stream life was used for all pink and chum salmon escapements.

For all pink and chum salmon escapements with only a peak count or where the computed value was less than the peak count, an expansion factor of 2.1 was used for pink salmon, and 2.4 for chum salmon. The values were derived from the ratio of peak count to total estimated escapement for streams where ascending, peak count, and descending counts were available.

Sockeye salmon escapements were estimated by an expansion factor of 1.25 for Acheredin Lake, Baralof Bay, and Mino Creek. All other sockeye salmon escapements were estimated by an expansion factor of 2.0. Coho salmon escapements were estimated by an expansion factor of 2.4.

Table 8. South Peninsula total indexed salmon escapements by species and year, 1962-93.

Year	Sockeye	Coho	Pink	Chum	Total
1962	18,800		1,598,800	399,400	2,017,000
1963	23,000		1,317,900	446,700	1,787,600
1964	15,700		1,436,400	454,800	1,906,900
1965	12,100		1,035,400	228,000	1,275,500
1966	17,000		719,400	422,000	1,158,400
1967	16,200		445,500	182,900	644,600
1968	12,800		823,300	279,100	1,115,200
1969	29,500		2,474,900	134,600	2,639,000
1970	16,500		1,298,900	280,500	1,595,900
1971	19,400		702,700	343,200	1,065,300
1972	11,900		111,400	254,500	377,800
1973	7,300		110,800	505,500	623,600
1974	95,600		284,400	257,300	637,300
1975	51,700		552,100	193,300	797,100
1976	69,700		1,456,400	327,200	1,853,300
1977	64,900		2,677,800	774,900	3,517,600
1978	64,800		2,858,700	600,500	3,524,000
1979	53,300		2,629,500	411,100	3,093,900
1980	45,900		2,641,600	362,400	3,049,900
1981	45,700		2,307,500	381,300	2,734,500
1982	39,200		2,293,000	386,900	2,719,100
1983	59,200		851,200	446,500	1,356,900
1984	54,800		3,811,600	699,700	4,566,100
1985	49,900		1,614,100	503,400	2,167,400
1986	48,000		1,716,700	544,600	2,309,300
1987	44,600		1,540,500	620,700	2,205,800
1988	74,100		2,839,600	496,400	3,410,100
1989	78,100		1,870,900	310,500	2,259,500
1990	95,300	87,500	1,598,400	354,700	2,135,900
1991	124,900	•	2,946,800	587,600	3,659,300
1992	97,600		2,834,400	335,500	3,267,500
1993	100,341		2,990,140	397,030	3,487,511
Average	1983-92				
	72,650		2,162,420	489,960	2,733,780
Average	1973-92		1 071 000	455 000	2 404 405
	63,230		1,971,800	455,000	2,494,405

Table 9. South Peninsula salmon harvest, all gears combined, season total by species and day, 1993.

Catch	<u>h</u>			<del></del>	<del></del>	Number	of Salmon		
Month I	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
June	7ª	1	1	32	1,059	0	0	231	1,322
	8ª	1	1	28	998	0	5	122	1,153
	9ª	1	1	8	1,272	0	0	354	1,634
	10ª 11ª	1	1	14	987	0	24	110	1,135
	12	1 31	1 36	4 64	393 4,435	0	11 0	206 30	614 4,529
	13	285	320	2,072	378,404	1	1,296	47,687	429,460
	15	262	289	1,128	316,089	3	2,192	54,860	374,272
	16	238	270	749	321,085	0	773	43,636	366,243
	17	301	324	720	341,090	2	1,952	42,568	386,332
	19 20	249 275	276 342	710 1,067	404,374 564,256	7 18	6,816 8,394	58,896 78,671	470,803 652,406
	21	76	87	737	135,476	7	7,138	15,031	158,389
	22	205	212	342	202,662	10	6,880	72,862	282,756
	26	113	131	549	138,392	129	13,268	41,210	193,548
	27	89	90	205	125,527	215	8,598	12,791	147,336
	28	80	82	1,404	99,319	610	19,803	55,606	176,742
July	29 3	51 26	51 27	35 2	12,083 3,821	234 2	4,051 2	8,980 5	25,383 3,832
bary	4	28	35	2	4,176	0	2	9	4,189
	5	25	37	1	5,762	ī	10	10	5,784
	6	22	32	2	6,896	0	0	0	6,898
	7	53	55	10	8,500	75	92	2,102	10,779
	8	20	27	3	5,800	2	23	52	5,880
	9 10	48 20	70 33	159 2	29,123 5,498	211 0	324 0	501 1	30,318 5,501
	11	13	17	0	2,665	Ö	3	2	2,670
	12ª	16	18	43	3,217	728	518	174	4,680
	13ª	1	1	29	459	164	352	226	1,230
	14	110	141	265	47,088	3,314	14,784	13,805	79,256
	15ª 16ª	17 14	19	27	2,418 2,040	454	480	116	3,495
	17ª	1	14 1	22 80	2,040	809 2,005	350 856	55 164	3,276 3,403
	18ª	ī	1	47	177	733	484	113	1,554
	20	75	76	88	37,713	8,043	52,645	8,958	107,447
	21	122	131	259	64,725	28,164	168,292	18,730	280,170
	22	166	192	471	75,486	31,340	270,950	29,132	407,379
	23 24	11 87	12 93	1 332	1,763 18,997	32 567	956 62,121	48 3,370	2,800 85,387
	26	145	169	242	51,028	17,116	328,780	15,517	412,683
	27	148	179	381	48,055	16,325	445,349	16,039	526,149
	28	165	199	378	38,109	17,817	462,806	18,858	537,968
August	1	133	150	185	16,985	6,163	595,605	46,814	665,752
	2 3	133 134	153 166	296 274	19,619 20,012	10,243 9,678	759,287 629,327	31,840 25,646	821,285 684,937
	6	107	126	140	13,099	5,300	600,003	19,555	638,097
	7	134	167	165	26,311	7,032	843,050	37,906	914,464
	8	131	161	89	15,892	6,304	698,724	24,559	745,568
	9	47	52	13	1,329	434	319,359	12,962	334,097
	10	40	40	10	661 8,761	163	165,638	3,665	170,137
	11 12	123 118	137 143	213 121	8,761 8,867	5,136 4,843	623,011 614,084	32,788 19,313	669,909 647,228
	13	74	77	90	3,066	3,087	340,485	9,222	355,950
	14	10	10	1	1,000	305	59,120	781	61,207
	15	*	*	*	*	*	*	*	*
	16	76	90	15	3,532	2,594	352,661	38,141	396,943
	17 18	77 50	81 55	16 13	5,782	3,036	427,961	10,695	447,490
	18	59	55 67	13 5	3,317 3,623	1,962 2,629	223,604 269,120	17,898 28,386	246,794 303,763
	20	48	55	13	2,284	1,606	160,839	16,383	181,125
	21	31	37	-6	1,344	1,666	168,771	2,623	174,410
	22	23	29	2	777	520	77,408	683	79,390
	23	16	20	1	995	263	52,421	236	53,916
	24	12 17	14	0	943	289	20,644	268	22,144
	25 26	17	18 13	0	1,414 1,360	589 203	26,548 6,342	2,273 864	30,824 8,769
	_0			v	1,500	203	0,542	001	0,700

Table 9. (page 2 of)

Cato	<u>h</u>				<del></del>	Number	of Salmon		- · · · · · · · · · · · · · · · · · · ·
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
Sept.	1 2	11	13	1	939	239	99	267	1,545
	2	28	38	5	4,197	954	416	833	6,405
	3	42	52	7	5,329	5,108	0	774	11,218
	4	4	4	0	54	1,561	0	13	1,628
	5	*	*	*	*	*	*	*	*
	6	5	5	0	310	33	0	82	425
	7	17	25	0	1,654	1,009	0	306	2,969
	8	12	16	6	482	794	0	286	1,568
	9	6	6	0	210	192	0	91	493
	10	6	8	0	621	445	0	48	1,114
	13	14	14	1	520	1,149	0	53	1,723
	14	14	16	7	523	853	0	89	1,472
	15	23	24	3	739	1,496	0	34	2,272
	16	7	7	0	94	1,500	0	13	1,607
	17	8	8	0	132	779	0	0	911
	20	*	*	*	*	*	*	*	*
	24	*	*	*	*	*	*	*	*
	29	*	*	*	*	*	*	*	*
	30	*	*	*	*	*	*	*	*
Oct.	1	*	*	*	*	*	*	*	*
	6	*	*	*	*	*	*	*	*
Total		353	6,204	14,413	3,689,074	220,148	9,928,107	1,048,257	14,899,999

<sup>&</sup>lt;sup>a</sup> Test fish harvest.
\* Confidentially requirements prohibit reporting harvest by day.

Table 10. South Peninsula salmon harvest, in number of fish, by statistical area, section, and district, 1993.

Stat. Area	Section	Chinook	Sockeye	Coho	Pink	Chum	Total
SOUTHEA	STERN DISTRICT						
281-15 281-25	Kupreanof Point Island & Fox Bays <b>East Stepovak Section Total</b>	475	25,856 107,061 <b>132,917</b>	15,391 7,926 23,317	263,453 163,731 427,184	10,052 <u>17,016</u> <b>27,069</b>	315,227 296,355 <b>611,583</b>
281-30 <b>2,129</b>	Stepovak Flats Section	11	1,914	75	48	81	
281-40 281-50 281-55 281-60	Grub Gulch/Clark Bay Orzinski Bay American Bay Blunt Pt. to Dorenoi Bay Northwest Stepovak Section Total	26 17 3 51 97	5,821 52,776 10,243 21,830 90,670	10 112 162 970 <b>1,254</b>	3,171 8,400 9,446 256,691 277,708	758 320 687 2,718 4,483	9,786 61,625 20,541 <u>282,260</u> <b>374,212</b>
281-70	Southwest Stepovak Section	226	50,790	7,998	948,305	15,585	1,022,748
281-80	Balboa Bay Section	269	46,481	3,872	731,608	15,939	798,169
281-90	Beaver Bay Section	65	8,243	518	276,507	2,839	288,172
	Southeastern Mainland Total	1,764	331,015	37,034	2,661,360	65,995	3,097,168
282-10 282-11 282-20 282-25 282-35 282-35 282-40 282-42 282-65 282-70 282-75	Popof Strait/Squaw Harbor Unga Cape/East Popof Acheredin Bay West Unga Island Bay Point Zachary Bay East Head/West Head Korovin Island Southeast Nagai Island Southwest Nagai island Cape Horn/Porpoise Rocks	119 5,512 50 244 4 8 12 1,181 75 234 5	31,017 479,232 28,516 79,799 1,169 1,710 2,175 133,724 742 39,563 2,894	1,640 90,540 834 7,569 113 36 450 23,510 388 4,503 445	149,504 1,845,892 33,138 564,824 5,759 138,154 5,657 326,736 27,052 147,713 128,431	6,548 165,303 2,342 26,888 825 8,309 583 46,424 1,079 9,889 431	188,828 2,586,479 64,880 679,324 7,870 148,217 8,877 531,575 29,336 201,902 132,206

Table 10. (page 2 of 3)

Stat. Area	Section	Chinook	Sockeye	Coho	Pink	Chum	Total
282-80	East Nagai Strait Shumagin Islands Section Total	99 <b>7,543</b>	8,551 809,092	$\frac{14}{130,042}$	55 3,372,915	4,637 273,258	13,356 4,592,850
SOUTHEA	STERN DISTRICT TOTAL	9,307	1,140,107	167,076	6,034,275	339,253	7,690,018
SOUTH C	ENTRAL DISTRICT						
283-15 283-17	Mino Creek Coal Bay Mino Creek-Little Coal Bay Section Total	0 <u>94</u> <b>94</b>	40 13,806 13,846	0 1,527 1,527	25,825 759,202 <b>785,027</b>	425 10,981 11,406	26,290 785,610 <b>811,900</b>
283-21 283-23 283-25 283-26	North Side Cape Tolstoi East Pavlof Bay Northwest Pavlof Bay Long Beach/Ukolnoi Island <b>Pavlof Bay Section Total</b>	9 6 0 <u>2</u> 17	2,318 5,597 34 13,879 <b>21,828</b>	126 27 1 2,079 2,233	60,708 404,877 8,305 81,331 555,221	1,584 22,837 14,144 2,649 41,214	64,745 433,344 22,482 99,940 620,513
283-24	Canoe Bay Section	4	325	69	162,415	91,040	253,853
SOUTH C	ENTRAL DISTRICT TOTAL	115	35,999	3,829	1,502,663	143,660	1,686,266
SOUTHWE	STERN DISTRICT						
284-36 284-37 284-38	Volcano Bay Northside Dolgoi Island South Dolgoi/Moss Cape <b>Volcano Bay Section Total</b>	$0 \\ 163 \\ \frac{14}{177}$	361 68,642 <u>6,202</u> <b>75,205</b>	137 8,110 <u>1,013</u> 9,260	51,872 155,278 <u>449,229</u> <b>656,379</b>	62,873 6,924 16,158 <b>85,955</b>	115,243 239,117 472,616 <b>826,97</b> 6
284-42 284-45	Belkofski Bay King Cove Belkofski Bay Section Total	55 <u>25</u> <b>80</b>	5,647 2,578 8,225	758 <u>358</u> 1,116	444,031 120,274 564,305	20,892 <u>17,816</u> <b>38,708</b>	471,383 141,051 <b>612,434</b>

Table 10. (page 3 of 3)

Stat. Area	Section	Chinook	Sockeye	Coho	Pink	Chum	Total
284-55	Deer Island Section	6	541	146	856,801	3,310	860,804
284-62	Outer Cold Bay	4	919	0	13,009	8,822	22,754
284-65	Lenard Harbor	4	89	9	167,666	7,303	175,071
284-67	Inner Cold Bay	<u>0</u> <b>8</b>	$\frac{34}{042}$	1 <u>7</u> 16	21,200	<u>13,800</u>	35,041
	Cold Bay Section Total	8	1,042	16	201,875	29,925	232,866
284-75	Morzhovoi Bay Section	58	12,413	323	1,414	1,502	15,710
284-90	Ikatan Bay Section	787	291,960	25,952	25,587	68,550	412,836
SOUTHWE	STERN DISTRICT TOTAL	1,122	427,062	46,028	2,365,938	232,895	3,073,045
UNIMAK .	DISTRICT						
285-20	Bird Island	654	535,378	2,707	6,616	92,074	637,429
285-30	Cape Lazaref	<u>686</u>	623,368	<u>315</u>	5,614	98,839	728,822
	Otter Cove Section Total	1,340	1,158,746	3,022	12,230	190,913	1,366,251
284-40	Cape Lutke Section	2,529	927,160	193	13,001	141,536	1,084,419
UNIMAK .	DISTRICT TOTAL	3,869	2,085,906	3,215	25,231	332,449	2,450,670
SOUTH P	SOUTH PENINSULA TOTAL		3,689,074	220,148	9,928,107	1,048,257	14,899,999

Table 11. South Peninsula salmon harvest by purse seine gear, season total by species and day, 1993.

Catc	h		-			Num	ber of Salmo	n	
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
June	13	109	116	1,666	223,495	1	1,292	32,115	258,569
	15	81	83	832	163,868	3	2,170	36,953	203,826
	16	55	55	322	183,261	0	770	24,664	209,017
	17	110	111	433	214,783	1	1,948	25,778	242,943
	19	75	76	517	239,467	0	6,812	39,637	286,433
	20	103	109	843	386,240	0	8,385	60,062	455,530
	21	34	38	701	118,860	5	7,111	14,547	141,224
	22	74	75	232	100,368	1	6,867	49,340	156,808
	26	56	57	484	96,643	95	13,252	40,211	150,685
	27	43	43	192	103,361	193	8,582	12,491	124,819
	28	42	42	1,385	88,103	577	19,797	55,330	165,192
_ ,	29	40	40	31	10,290	229	4,051	8,830	23,431
July	7	14	14	6	568	0	79	1,993	2,646
	14	55	55	222	19,020	3,167	12,215	12,794 5,259	47,418 86,376
	20	32	32	82	28,146	4,831	48,058	14,495	250,768
	21 22	57 77	57 81	218 410	51,670 50,015	22,614 21,106	161,771 255,771	24,145	351,447
	24	44	44	314	8,427	386	52,675	2,264	64,066
	26	59	63	210	16,130	12,992	309,270	9,449	348,051
	27	67	71	357	23,492	13,164	421,873	11,414	470,300
	28	83	87	347	13,434	14,904	438,000	13,410	480,095
August		63	70	129	9,480	3,574	576,619	43,822	633,624
nagabe	2	75	81	276	10,199	7,807	735,941	28,844	783,067
	3	83	86	245	10,509	8,183	599,021	21,523	639,481
	6	65	71	134	5,222	4,465	580,479	17,048	607,348
	7	77	89	145	10,957	5,502	818,968	33,323	868,895
	8	76	84	77	4,881	4,178	670,597	20,421	700,154
	9	46	51	13	1,309	434	319,019	12,922	333,697
	10	39	39	10	660	163	165,603	3,657	170,093
	11	72	76	209	4,655	3,884	606,471	30,338	645,557
	12	74	82	108	3,333	3,298	592,211	16,645	615,595
	13	51	51	88	1,652	2,570	329,428	8,674	342,412
	14	10	10	1	1,000	305	59,120	781	61,207
	15	*	*	*	*	*	*	*	*
	16	53	56	15	2,304	1,954	343,240	37,478	384,991
	17	58	58	16	4,397	2,514	419,488	10,199	436,614
	18	37	40	11	2,580	1,703	220,419	17,628	242,341
	19	44	47	5	2,463	2,134	265,064	27,917	297,583
	20	40	42	11	1,369	1,232	156,685	16,179	175,476
	21	23	28	6	722	1,407	166,047	2,441	170,623
	22	11 6	12 7	1 0	51 0	84	73,444	444 77	74,024
	23 24	6 *	*	*	*	2	48,530	*	48,609
	24 25	*	*	*	*	*	*	*	*
	26	*	*	*	*	*	*	*	*
Total		123	2,439	11,304	2,217,387	149,670	9,575,700	848,162	12,802,223

<sup>\*</sup> Confidentially requirements prohibit reporting harvest by day.

Table 12. South Peninsula salmon harvest by drift gillnet gear, season total by species and day, 1993.

Catc	h		_			Numbe	r of Salmo	n	
Month 1	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
June	13	115	120	288	132,660	0	0	13,927	146,875
	15	116	128	165	129,195	0	0	16,062	145,422
	16	122	132	263	113,482	0	1	17,675	131,421
	17	132	142	216	110,931	1	1	15,785	126,934
	19	134	156	154	156,374	6	0	17,918	174,452
	20	113	151	155	155,555	12	2	16,255	171,979
	22	116	121	106	98,243	9	13	22,851	121,222
	26	6	6	4	4,396	2	٥	207	4,609
	27	6	6	0	1,292	2	0	82	1,376
	29	*	*	*	*	*	*	*	. *
July	20	29	29	4	5,815	3,064	2,301	3,267	14,451
	21	36	39	33	6,233	4,975	1,647	3,394	16,282
	22	30	30	30	4,107	7,959	1,053	3,058	16,207
	26	25	26	5	1,542	3,016	2,014	2,660	9,237
	27	20	21	6	1,224	1,968	827	1,400	5,425
	28	17	19	10	1,780	1,600	1,241	1,342	5,973
August	1	15	15	13	720	1,170	1,160	758	3,821
	2	10	10	2	580	1,050	587	466	2,685
	3	4	4	0	85	253	53	221	612
	6	*	*	*	*	*	*	*	*
	7	5	6	5	490	280	508	630	1,913
	8	*	*	*	*	*	*	*	*
	11	*	*	*	*	*	*	*	*
	12	4	5	2	126	235	201	121	685
Sept	13	*	*	*	*	*	*	*	*
	14	*	*	*	*	*	*	*	*
Total		144	1,179	1,462	926,209	26,396	12,054	138,691	1,104,812

<sup>\*</sup> Confidentially requirements prohibit reporting harvest by day.

Table 13. South Peninsula salmon harvest by set gillnet gear, season total by species and day, 1993.

Catc	h		-			Numbe	er of Salmon		
Month 1	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
June	12	31	36	64	4,435	0	0	30	4,529
	13	61	84	118	22,249	0	4	1,645	24,016
	15	65	78	131	23,026	0	22	1,845	25,024
	16	62	83	164	24,342	0	2	1,297	25,805
	17	59	71	71	15,376	0	3	1,005	16,455
	19	40	44	39	8,533	1	4	1,341	9,918
	20	59	82	69	22,461	6	7	2,354	24,897
	21	42	49	36	16,616	2	27	484	17,165
	22	15	16	4	4,051	0	0	671	4,726
	26	51	68	61	37,353	32	16	792	38,254
	27	40	41	13	20,874	20	16 6	218 276	21,141 11,550
	28	38	40	19 4	11,216	33 5	0	92	1,234
July	29 3	9 26	9 27	2	1,133 3,821	2	2	5	3,832
oury	4	28	35	2	4,176	Õ	2	9	4,189
	5	25	37	í	5,762	1	10	10	5,784
	6	22	32	2	6,896	ō	0	ő	6,898
	7	39	41	4	7,932	75	13	109	8,133
	8	20	27	3	5,800	2	23	52	5,880
	9	48	70	159	29,123	211	324	501	30,318
	10	20	33	2	5,498	0	0	1	5,501
	11	13	17	0	2,665	0	3	2	2,670
	12	15	17	0	2,748	0	2	2	2,752
	14	55	86	43	28,068	147	2,569	1,011	31,838
	15	16	18	4	2,215	0	59	13	2,291
	16	13	13	0	1,885	1	35	6	1,927
	20	14	15	2	3,752	148	2,286	432	6,620
	21	29	35	8	6,822	575	4,874	841	13,120
	22	59	81	31	21,364	2,275	14,126	1,929	39,725
	23	11	12	1	1,763	32	956	48	2,800
	24	43	49	18	10,570	181	9,446	1,106	21,321
	26 27	61 61	80 87	27 18	33,356 23,339	1,108 1,193	17,496 22,649	3,408 3,225	55,395 50,424
	28	65	93	21	22,895	1,193	23,565	4,106	51,900
August		55	65	43	6,785	1,419	17,826	2,234	28,307
August	2	48	62	18	8,840	1,386	22,759	2,530	35,533
	3	47	76	29	9,418	1,242	30,253	3,902	44,844
	6	39	52	5	7,682	774	19,424	2,287	30,172
	7	52	72	15	14,864	1,250	23,574	3,953	43,656
	8	52	74	12	10,773	1,724	27,962	3,958	44,429
	9	*	*	*	*	*	*	*	*
	10	*	*	*	*	*	*	*	*
	11	48	58	4	3,821	947	16,360	2,305	23,437
	12	40	56	11	5,408	1,310	21,672	2,547	30,948
	13	23	26	2	1,414	517	11,057	548	13,538
	16	23	34	0	1,228	640	9,421	663	11,952
	17	19	23	0	1,385	522	8,473	496	10,876
	18	13	15	2	737	259	3,185	270	4,453
	19	15	20	0	1,160	495	4,056	469	6,180
	20	8		2	915	374	4,154	204	5,649
	21 22	8 12		0 1	622 726	259 436	2,724 3,964	182 239	3,787 5,366
	23	10		1	726 995	261	3,964	159	5,300
	24	9		0	943	289	2,437	268	3,937
	25	14		0	1,412	588	2,648	273	4,921
	26	10		ő	1,359	196	2,092	244	3,891
Sept.	1	11		1	939	239	99	267	1,545
•	2	28		5	4,197	954	416	833	6,405
	3	42		7	5,329	5,108	0	774	11,218
	4	4	4	0	54	1,561	0	13	1,628
	5	*		*	*	*	*	*	*
	6	5	5	0	310	33	0	82	425

Table 13. (page 2 of 2)

Catc	h		_			Numb	er of Salmor	1	
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
Sept.	7	17	25	0	1,654	1,009	0	306	2,969
	8	12	16	6	482	794	0	286	1,568
	9	6	6	0	210	192	0	91	493
	10	6	8	0	621	445	0	48	1,114
	13	13	13	1	519	1,137	0	50	1,707
	14	13	15	7	523	839	0	83	1,452
	15	23	24	3	739	1,496	0	34	2,272
	16	7	7	0	94	1,500	0	13	1,607
	17	8	8	0	132	779	0	0	911
	20	*	*	*	*	*	*	*	*
	24	*	*	*	*	*	*	*	*
	29	*	*	*	*	*	*	*	*
	30	*	*	*	*	*	*	*	*
Oct.	1	*	*	*	*	*	*	*	*
	6	*	*	*	*	*	*	*	*
Total		86	2,575	1,317	539,008	39,190	337,369	59,554	976,438

<sup>\*</sup> Confidentially requirements prohibit reporting harvest by day.

Table 14. South Peninsula salmon catches, in number of fish (excluding test fish catches), by species, district, and gear, 1993.

	Chinook	Sockeye	Coho	Pink	Chum	Total
SOUTHEASTERN D	DISTRICT					
Seine Set Gillnet <b>Total</b>	8,013 964 <b>8,977</b>	711,537 422,100 1,133,637	135,580 26,604 <b>162,184</b>	5,714,534 316,757 6,031,291	294,361 43,042 337,403	6,864,025 809,467 <b>7,673,49</b> 2
SOUTH CENTRAL	DISTRICT					
Seine Set Gillnet Total	114 $1$ $115$	33,749 2,250 <b>35,999</b>	3,794 <u>35</u> 3,829	1,501,358 1,305 1,502,663	143,437 223 143,660	1,682,452 3,814 1,686,266
SOUTHWESTERN I	DISTRICT					
Seine Drift Gillnet Set Gillnet Total	601 231 290 1,122	249,839 78,346 <u>98,877</u> <b>427,062</b>	10,121 23,356 <u>12,551</u> <b>46,028</b>	2,336,728 9,903 19,307 2,365,938	190,829 28,678 <u>13,388</u> <b>232,895</b>	2,788,118 140,514 144,413 3,073,045
UNIMAK DISTRIC	CT					
Seine Drift Gillnet Set Gillnet Total	2,576 1,231 62 3,869	1,222,262 847,863 15,781 2,085,906	175 3,040 0 3,215	23,080 2,151 0 25,231	219,535 110,013 2,901 332,449	1,467,628 964,298 18,744 2,450,670
SOUTH PENINSUI	LA TOTAL					
Seine Drift Gillnet Set Gillnet Total	11,304 1,462 1,317 14,083	2,217,387 926,209 539,008 3,682,604	149,670 26,396 39,190 215,256	9,575,700 12,054 337,369 <b>9,925,123</b>	848,162 138,691 59,554 1,046,407	12,802,223 1,104,812 976,438 14,883,473

Table 15. Estimated exvessel value of South Peninsula June and post June fisheries, 1984-93.

			Sp	ecies		
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1984						
June Post June Total	66,000 114,000 180,000	6,100,000 5,192,000 11,292,000	0 1,319,000 1,319,000	215,000 10,658,000 10,873,000	800,000 2,348,000 3,148,000	7,181,000 19,631,000 26,812,000
1985						
June Post June Total	175,000 11,000 186,000	12,230,000 1,016,000 13,246,000	15,000 866,000 881,000	30,000 3,755,000 3,785,000	1,185,000 1,737,000 2,922,000	13,635,000 7,385,000 21,020,000
1986						
June Post June Total	33,000 40,000 73,000	3,427,000 7,503,000 10,930,000	0 1,068,000 1,068,000	62,000 2,668,000 2,730,000	932,000 3,488,000 4,420,000	4,454,000 14,767,000 19,221,000
1987						
June Post June Total	147,000 69,000 216,000	9,113,000 5,334,000 14,447,000	0 1,398,000 1,398,000	4,000 1,769,000 1,773,000	1,397,000 2,444,000 3,841,000	10,661,000 11,014,000 21,675,000
1988						
June Post June Total	121,000 144,000 265,000	10,216,000 10,864,000 21,080,000	0 4,114,000 4,114,000	99,000 19,705,000 19,804,000	3,721,000 8,218,000 11,939,000	14,157,000 43,045,000 57,202,000
1989						
June Post June Total	76,000 69,000 145,000	16,712,000 7,880,000 24,592,000	0 2,388,000 2,388,000	130,000 9,399,000 9,529,000	1,530,000 1,225,000 2,755,000	18,448,000 20,961,000 39,409,000
1990						
June Post June Total	119,000 184,000 303,000	14,057,000 8,647,000 22,704,000	0 1,600,000 1,600,000	242,000 2,531,000 2,773,000	1,521,000 1,418,000 2,939,000	15,939,000 14,380,000 30,319,000
1991						
June Post June Total	65,000 22,000 87,000	7,400,000 3,869,000 11,269,000	40 871,960 872,000	1,800,000 2,131,000 3,931,000	1,200,000 1,125,000 2,325,000	10,465,040 8,018,960 18,484,000

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		· · · · · · · · · · · · · · · · · · ·	Spe	ecies		
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1992						
June Post June Total	64,000 39,000 103,000	21,774,000 8,561,000 30,335,000	0 1,666,000 1,666,000	138,000 5,266,000 5,404,000	1,075,000 1,463,000 2,538,000	23,051,000 16,995,000 40,046,000
1993						
June Post June Total	126,151 34,001 160,152	13,155,634 3,465,832 16,621,466	3,013 645,324 648,337	16,250 4,648,857 4,665,107	889,534 879,250 1,768,784	14,190,582 9,673,264 23,863,846
1984-93 Ave	rage					
June Post June Total	99,215 72,600 171,815	11,418,463 6,233,183 17,651,647	1,805 1,593,628 1,595,434	273,625 6,253,086 6,526,711	1,425,053 2,434,525 3,859,578	13,218,162 16,587,022 29,805,185

Table 16. Estimated exvessel value of South Peninsula commercial salmon fisheries, 1993<sup>a</sup>.

	Chinook	Sockeye	Coho	Pink	Chum	Total				
South Unimak and Shumagin Islands June fisheries										
Poundage Avg. Wt. Value/pound Total value	16.7 0.80	5.4	6.0 0.41	2.5	3,176,906 6.0 0.28 889,534	19,588,524				
South Penins	ula post d	June Fisheri	es							
Poundage Avg. Wt. Value/pound Total Value	14.6 0.76		6.0 0.49	3.4 0.14	6.2 0.27	61,927,440 23,863,846				
Total South	Peninsula	fisheries								
Poundage Avg. Wt. Value/pound Total Value	17.2 0.80	0.82	6.3 0.49	3.4 0.14	6.3 0.28	85,918,481 43,171,469				

<sup>&</sup>lt;sup>a</sup> Figures are estimates based on limited information and do not include test fisheries.

Table 17. South Unimak and Shumagin Islands June fisheries regulation history, 1962-1992.

Year	South Unimak	Shumagin Islands				
1962-66	5 days per week	5 days per week				
1967-70	7 days per week	7 days per week				
1971-72	6:00 A.M. Monday - 6:00 A.M. Saturday	7 days per week				
1973	*Four 13 hour fishing periods per week	*Four 13 hour fishing periods per week.				
	* Both fisheries were closed by emergency order during June 25-28 due t indications of the Bristol Bay run being below escapement requirements.					
1974	No fishery	No fishery				
1975-83	*6.8% of predicted Bay catch	Bristol 1.5% of predicted Bristol Bay catch				
1984-89	No more than 96 hours per 7 consecutive fishing time in each	day period and no more than 72 hours of fishery (windows).				
1986	*6.8% allocation r June 26-30 segmen Windows No fishing before	June 26-30 segment Windows				
	A 400,000 chum salmon ceiling	placed on both fisheries combined.				
1987	*Same as during 1	984-85 for both fisheries.				
1988-89	*6.8 of predicted l Bay catch Windows	Bristol 1.5% of predicted Bristol Bay catch Windows				
	A 500,000 chum salmon ceiling	placed on both fisheries combined.				

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Dates	South Unimak	Shumagin Islands					
*Each sockey	re allocation is broken down	into time period guideline harvest levels.					
June 1 - 11	5%	9%					
June 12 - 18	29% 28%						
June 19 - 25	51% 41%						
June 26 - 30	<u>15% 22%</u>						
	100%	100%					
1990-91	The chum ceiling was increased from 500,000 to 600,000.						
	The "Window Regulations" implemented in 1984 to limit the amount of fishin time that could be allowed were deleted.						
	The season was delayed unto	til June 13 and the time period sockeye allocations for d as follow:					
	June 13-18	35%					
	June 19-25	45%					
	June 26-30	20%					
	-	vas limited to 375 meshes of which mesh size may not for the first 25 meshes above the lead line which may					
	The gear depth on gillnets a 90 meshes.	along the South Peninsula was limited to no more than					
	Seine leads may not exceed	d 150 fathoms for the entire Alaska Peninsula.					
1992-93		creased from 600,000 to 700,000 fish. The other as in effect for 1990 and 1991.					

Table 18. South Unimak and Shumagin Islands June salmon harvest<sup>a</sup>, in number of fish, by species, 1970-93.

Total	Chum	Pink	Coho	Sockeye	Chinook	Year
2,200,555	441,912	107,445	48	1,650,134	1,016	1970
991,367	509,197	19,240	1	462,101	828	1971
1,038,612	518,829	17,924	20	501,197	642	1972
465,885	200,630	19,430	28	245,550	247	1973
C	0	0	0	0	0	1974
346,286	100,822	5,247	1	240,099	117	1975
741,613	410,347	23,902	3	305,227	2,134	1976
363,625	116,114	5,398	0	241,592	521	1977
699,224	121,908	89,942	3	486,835	536	1978
1,111,694	104,106	154,813	290	851,432	1,053	1979
5,245,492	508,865	1,526,306	853	3,206,275	3,193	1980
2,842,361	563,982	451,252	320	1,821,135	5,672	1981
4,940,942	1,095,044	1,718,825	1,241	2,118,701	7,131	1982
2,819,364	785,667	55,875	496	1,963,863	13,463	1983
2,649,067	337,120	919,876	14	1,388,203	3,854	1984
2,340,089	433,829	106,615	2,468	1,791,400	5,777	1985
1,117,052	351,769	291,989	2	471,397	1,895	1986
1,259,769	443,141	16,982	380	794,103	5,163	1987
1,467,941	526,711	180,224	255	756,687	4,064	1988
2,401,661	455,163	199,235	0	1,744,505	2,758	1989
2,390,747	518,755	515,297	1	1,346,359	10,335	1990
2,953,957	776,120	620,108	12	1,553,150	4,567	1991
3,537,923	428,136	643,348	4	2,462,675	3,760	1992
3,603,684	533,270	81,176	1,233	2,978,453	9,552	1993
					1970-93	Average
1,980,371	428,393	323,769	320	1,224,211	3,678	

<sup>&</sup>lt;sup>a</sup>Numbers of salmon include test fish catches.

Table 19. Shumagin Islands June salmon harvest<sup>a</sup>, in number of fish, by species, 1970-93.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	148	139,735	2	19,728	44,909	204,522
1971	279	39,341	1	7,632	103,886	151,139
1972	242	74,398	16	6,018	107,810	188,484
1973	102	22,964	17	8,278	22,910	54,271
1974	0	0	0	. 0	. 0	0
1975	16	49,325	0	2,042	35,543	86,926
1976	305	72,016	0	5,643	74,109	152,073
1977	128	45,912	0	2,001	21,899	69,940
1978	267	67,876	0	42,562	18,479	129,184
1979	475	179,139	252	105,813	40,953	326,632
1980	266	475,127	0	385,695	50,366	911,454
1981	. 1,217	350,572	237	126,248	54,071	532,345
1982	1,554	450,548	0	686,671	161,316	1,300,089
1983	5,277	416,494	3	15,434	169,277	606,485
1984	1,830	256,838	14	449,188	109,207	817,077
1985	1,676	336,431	2,466	36,804	109,004	486,381
1986	532	156,027	1	141,315	99,048	396,923
1987	1,146	140,567	0	5,640	37,064	184,417
1988	1,939	282,230	244	93,546	61,946	439,905
1989	495	396,958	0	45,067	47,528	490,048
1990	1,870	255,649	0	70,855	63,517	391,891
1991	1,501	337,115	7	119,186	105,711	563,520
1992	1,387	416,653	1	142,221	104,245	664,507
1993	4,965	611,880	727	43,441	151,329	812,342
Average	9 1970-93					, , , , , , , , , , , , , , , , , , ,
	1,151	232,241	166	106,710	74,755	415,023

<sup>&</sup>lt;sup>a</sup>Numbers of salmon include test fish catches.

Table 20. South Unimak June salmon harvest<sup>a</sup>, in number of fish, by species, 1970-93.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	868	1,510,399	46	87,717	397,003	1,996,033
1971	549	422,760	0	11,608	405,311	840,228
1972	400	426,799	4	11,906	411,019	850,128
1973	145	222,586	11	11,152	177,720	411,614
1974	0	0	0	0	0	0
1975	101	190,774	1	3,205	65,279	259,360
1976	1,829	233,211	3	18,259	336,238	589,540
1977	393	195,680	0	3,397	94,215	293,685
1978	269	418,959	3	47,380	103,429	570,040
1979	578	672,293	38	49,000	63,153	785,062
1980	2,927	2,731,148	853	1,140,611	458,499	4,334,038
1981	4,455	1,470,563	83	325,004	509,911	2,310,016
1982	5,577	1,668,153	1,241	1,032,154	933,728	3,640,853
1983	8,186	1,547,369	493	40,441	616,390	2,212,879
1984	2,024	1,131,365	0	470,688	227,913	1,831,990
1985	4,101	1,454,969	2	69,811	324,825	1,853,708
1986	1,363	315,370	1	150,674	252,721	720,129
1987	4,017	653,536	380	11,342	406,077	1,075,352
1988	2,125	474,457	11	86,678	464,765	1,028,036
1989	2,263	1,347,547	0	154,168	407,635	1,911,613
1990	8,465	1,090,710	1	444,442	455,238	1,998,856
1991	3,066	1,216,035	5	500,922	670,409	2,390,437
1992	2,373	2,046,022	3	501,127	323,891	2,873,416
1993	4,587	2,366,573	506	37,735	381,941	2,791,342
Average	e 1970-93					
Average	2,528	991,970	154	217,059	353,638	1,565,348

<sup>&</sup>lt;sup>a</sup> Numbers of salmon include test fish catches.

Table 21. South Unimak and Shumagin Islands June fisheries, number of fishing days and hours by year, 1976-93.

	South	Unimak	Shumagin	Islands	
Year	Days	Hours	Days	Hours	
1976	21	504	15	360	
1977	11	264	21	504	
1978	23	552	23	552	
1979	33	792	28	672	
1980	26	624	26	624	
1981	24	576	20	480	
1982	30	720	22	528	
1983	11	264	10	228	
1984	5	98	6	122	
1985	9	144	9	142	
1986	8	148	8	148	
1987	12	226	5	76	
1988	8	110	9	151	
1989	5	84	4	72	
1990	13	267	9	198	
1991	8	158	5	88	
1992	8	139	5	42.5	
1993	10	176	8	140	
Average	1976-93				
J	14.7	324.8	12.9	284.9	

Table 22. South Unimak and Shumagin Islands June fisheries, sockeye allocations vs. actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-93.

Year	S. Unimak- Shumagin Islands Guideline Harvest Level (GHL)	Actual S. Unimak- Shumagin Is. Harvest	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak- Shumagin Harvest	S. Unimak- Shumagin GHL % of Combined Bristol Bay & S. Unimak- Shumagin Harvest <sup>a</sup>	S. Unimak- Shumagin Is. Harvest % of Combined Bristol Bay- S. Unimak Harvest*	S. Unimak- Shumagin Is. GHL if Actual Bristol Bay Harvest Was Forecasted*
1975	215,000	240,099	4,898,814	5,138,913	4.18	4.90	427,000
1976	425,000	305,227	5,619,292	5,924,519	7.17	5.43	492,000
1977	237,000	241,592	4,877,880	5,119,472	4.63	4.95	425,000
1978	522,000	486,835	9,928,139	10,414,974	5.01	4.90	864,000
1979	1,100,000	851,432	21,428,606	22,280,038	4.94	3.97	1,849,000
1980 <sup>b</sup>	3,068,000	3,206,275	23,761,746	26,968,021	11.38	13.49	2,238,000
1981	1,760,000	1,821,135	25,603,081	27,424,216	6.42	7.11	2,276,000
1982	2,258,000	2,118,701	15,104,391	17,223,092	13.11	14.03	1,430,000
1983	1,793,000	1,963,863	37,372,031	39,335,894	4.56	5.25	3,265,000
1984	1,356,000	1,388,203	24,710,306	26,098,509	5.20	5.62	2,166,000
1985	1,685,000	1,791,400	23,702,883	25,494,283	6.61	7.56	2,116,000
1986°	1,107,000	471,397	15,776,056	16,247,453	6.81	2.99	1,349,000
1987	775,000	794,103	16,068,775	16,862,878	4.60	4.94	1,400,000
1988°	1,542,000	756,687	13,989,757	14,746,444	10.46	5.41	1,224,000
1989	1,463,000	1,744,505	28,735,306	30,479,811	4.80	6.07	2,530,000
1990	1,327,000	1,346,359	33,523,127	34,869,486	3.81	4.02	2,894,000
1991°	1,920,000	1,553,150	26,233,469	27,786,619	6.91	5.92	2,306,000
1992 <sup>d</sup>	2,391,000	2,462,675	31,967,121	34,429,796	6.94	7.70	2,858,000
1993 <sup>d</sup>	2,899,000	2,978,453	40,842,635	43,821,088	6.62	7.29	3,637,000

<sup>&</sup>lt;sup>a</sup> The numbers below were calculated by adding the actual Bristol Bay sockeye harvest and the South Unimak-Shumagin Islands June sockeye harvest together and determining or applying the appropriate percentages. Calculations assume all sockeye salmon caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

<sup>&</sup>lt;sup>b</sup> 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

<sup>&</sup>lt;sup>c</sup> These sockeye allocations were not reached largely, if not totally, due to a chum cap.

<sup>&</sup>lt;sup>d</sup> Bristol Bay catch numbers are preliminary.

Γable 23. South Unimak June fishery, sockeye allocations vs. actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-93.

Year	S. Unimak Guideline Harvest Level (GHL)	Actual S. Unimak Harvest	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak- Shumagin Harvest	S. Unimak GHL % of Combined Bristol Bay & S. Unimak- Shumagin Harvest*	S. Unimak Harvest % of Combined Bristol Bay- S. Unimak Harvest*	S. Unimak GHL if Actual Bristol Bay Harvest Was Forecasted
1975	165,000	190,774	4,898,814	5,138,913	3.21	3.89	349,000
1976	350,000	233,211	5,619,292	5,924,519	5.91	4.15	403,000
1977	195,000	195,680	4,877,880	5,119,472	3.81	4.01	348,000
1978	428,000	418,959	9,928,139	10,414,974	4.11	4.22	708,000
1979	900,000	672,293	21,428,606	22,280,038	4.04	3.14	1,515,000
1980 <sup>b</sup>	2,513,000	2,731,148	23,761,746	26,968,021	9.32	11.49	1,834,000
1981	1,442,000	1,470,563	25,603,081	27,424,216	5.26	5.74	1,865,000
1982	1,850,000	1,668,153	15,104,391	17,223,092	10.74	11.04	1,171,000
1983	1,469,000	1,547,369	37,372,031	39,335,894	3.73	4.14	2,675,000
1984	1,111,000	1,131,365	24,710,306	26,098,509	4.26	4.58	1,775,000
1985	1,380,000	1,454,969	23,702,883	25,494,283	5.41	6.14	1,734,000
1986°	907,000	315,370	15,776,056	16,247,453	5.58	2.00	1,105,000
1987	635,000	653,536	16,068,775	16,862.878	3.77	4.07	1,147,000
1988°	1,263,000	474,457	13,989,757	14,746,444	8.56	3.39	1,003,000
1989	1,199,000	1,347,547	28,735,306	30,479,811	3.93	4.69	2,073,000
1990	1,087,000	1,090,710	33,523,127	34,869,486	3.12	3.25	2,371,000
1991°	1,573,000	1,216,035	26,233,469	27,786,619	5.66	4.64	1,889,000
1992 <sup>d</sup>	1,959,000	2,046,022	31,967,121	34,429,796	5.69	6.40	2,341,000
1993 <sup>d</sup>	2,375,000	2,366,573	40,842,635	43,821,088	5.42	5.79	2,980,000

<sup>&</sup>lt;sup>a</sup> The numbers below were calculated by adding the actual Bristol Bay sockeye harvest and the South Unimak-Shumagin Islands June sockeye harvest together and determining or applying the appropriate percentages. Calculations assume all sockeye salmon caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

<sup>&</sup>lt;sup>b</sup> 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

<sup>&</sup>lt;sup>c</sup> These sockeye allocations were not reached largely, if not totally, due to a chum cap.

<sup>&</sup>lt;sup>d</sup> Bristol Bay catch numbers are preliminary.

Table 24. Shumagin Islands June fishery, sockeye allocations vs. actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-93.

Year	Shumagin Islands Guideline Harvest Level (GHL)	Actual Shumagin Is. Harvest	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak- Shumagin Harvest	Shumagin GHL % of Combined Bristol Bay & S. Unimak- Shumagin Harvest <sup>a</sup>	Shumagin Is. Harvest % of Combined Bristol Bay- S. Unimak Harvest <sup>a</sup>	Shumagin Is. GHL if Actual Bristol Bay Harvest Was Forecasted
1975	50,000	49,325	4,898,814	5,138,913	0.97	1.01	77,000
1976	75,000	72,016	5,619,292	5,924,519	1.27	1.28	89,000
1977	42,000	45,912	4,877,880	5,119,472	0.82	0.94	77,000
1978	94,000	67,876	9,928,139	10,414,974	0.90	0.68	156,000
1979	200,000	179,139	21,428,606	22,280,038	0.90	0.84	334,000
1980 <sup>b</sup>	555,000	475,127	23,761,746	26,968,021	2.06	2.00	405,000
1981	318,000	350,572	25,603,081	27,424,216	1.16	1.37	411,000
1982	408,000	450,548	15,104,391	17,223,092	2.37	2.98	258,000
1983	324,000	416,494	37,372,031	39,335,894	0.82	1.11	590,000
1984	245,000	256,838	24,710,306	26,098,509	0.94	1.04	391,000
1985	305,000	336,431	23,702,883	25,494,283	1.20	1.42	382,000
1986°	200,000	156,027	15,776,056	16,247,453	1.23	0.99	244,000
1987	140,000	140,567	16,068,775	16,862,878	0.83	0.87	253,000
1988°	279,000	282,230	13,989,757	14,746,444	1.89	2.02	221,000
1989	264,000	396,958	28,735,306	30,479,811	0.87	1.38	457,000
1990	240,000	255,649	33,523,127	34,869,486	0.69	0.76	523,000
1991°	347,000	337,115	26,233,469	27,786,619	1.25	1.29	417,000
1992 <sup>d</sup>	432,000	416,653	31,967,121	34,429,796	1.25	1.30	516,000
1993 <sup>a</sup>	524,000	611,880	40,842,635	43,821,088	1.20	1.50	657,000

<sup>&</sup>lt;sup>a</sup> The numbers below were calculated by adding the actual Bristol Bay sockeye harvest and the South Unimak-Shumagin Islands June sockeye harvest together and determining or applying the appropriate percentages. Calculations assume all sockeye caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

<sup>&</sup>lt;sup>b</sup> 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

<sup>&</sup>lt;sup>c</sup> These sockeye allocations were not reached largely, if not totally, due to a chum cap.

<sup>&</sup>lt;sup>d</sup> Bristol Bay catch numbers are preliminary.

Table 25. South Unimak and Shumagin Islands June sockeye and chum salmon harvest<sup>a</sup>, in number of fish, 1960-93.

		Sockeye	2		Chum	
<b>37</b>	South	Shumagir		South	Shumagin	
Year	Unimak	Islands	Total	Unimak	Islands	Total
1960	137,000	19,000	156,000	84,000	11,000	95,000
1961	199,000	55,000	254,000	157,000	36,000	193,000
1962	272,000	54,000	326,000	209,000	61,000	270,000
1963	116,000	33,000	116,000	36,000	36,000	117,000
1964	159,000	85,000	244,000	161,000	67,000	228,000
1965	568,000	207,000	775,000	121,000	45,000	166,000
1966	528,000	54,000	582,000	215,000	17,000	232,000
1967	186,000	69,000	255,000	73,000	51,000	124,000
1968	342,000	233,000	575,000	115,000	51,000	166,000
1969	781,000	76,000	857,000	254,000	13,000	267,000
1970	1,510,399	139,735 1	,650,134	397,003	44,909	441,912
1971	422,760	39,341	462,101	405,311	103,886	509,197
1972	426,799	74,398	501,197	411,019	107,810	518,829
1973	222,586	22,964	245,550	177,720	22,910	200,630
1974	0	0	0	. 0	. 0	
1975	190,774	49,325	240,099	65,279	35,543	100,822
1976	233,211	72,016	305,227	336,238	74,109	410,347
1977	195,680	45,912	241,592	94,215	21,899	116,114
1978	418,959	67,876	486,835	103,429	18,479	121,908
1979	672,293	179,139	851,432	63,153	40,953	104,106
1980	2,731,148	475,127 3	,206,275	458,499	50,366	508,865
1981	1,470,563		,821,135	509,911	54,071	563,982
1982	1,668,153		,118,701	933,728	161,316	1,095,044
1983	1,547,369		, 963, 863	616,390	169,277	785,667
1984	1,131,365		,388,203	227,913	109,207	337,120
1985	1,454,969	336,431 1	,791,400	324,825	109,004	433,829
1986	315,370	156,027	471,397	252,721	99,048	351,769
1987	653,536	140,567	794,103	406,077	37,064	443,141
1988	474,457	282,230	756,687	464,765	61,946	526,711
1989	1,347,547		,744,505	407,635	47,528	455,163
1990	1,090,710		,346,359	455,238	63,517	518,755
1991	1,216,035		,553,150	670,409	105,711	776,120
1992	2,046,022		,462,675	323,891	104,245	428,136
1993	2,366,573		,978,453	381,941	151,329	533,270
Avera	ge 1970-93				<del></del>	
	991,970	232,241 1	224 211	353,638	74,755	428,393

<sup>&</sup>lt;sup>a</sup> Numbers of salmon include test fish catches.

Table 26. Shumagin Islands Section June test fish salmon catch, 1993.

				Number of Adult Salmon					Sockeye To
Date		Set	Chinook	Sockeye	Coho	Pink	Chum	Total	Chum Ratio
<del></del>						***********			
June	7	Totalª	36	1,061	0	0	231	1,328	4.6 : 1.0
June	8	Totalb	28	998	0	8	122	1,156	8.2 : 1.0
June	9	Totalc	12	1,281	0	0	354	1,647	3.6 : 1.0
June	10	Totald	18	989	0	24	121	1,152	8.2 : 1.0
June	11	Totale	13	393	0	11	206	623	1.9 : 1.0

<sup>&</sup>lt;sup>a</sup>June 7: One set each at Popof Head and Red Bluff, two sets at Middle Set.

<sup>&</sup>lt;sup>b</sup>June 8: One set each at Popof Head, Middle Set, and Red Bluff.

<sup>&</sup>lt;sup>c</sup>June 9: One set each at Popof Head, Middle Set, and Red Bluff.

<sup>&</sup>lt;sup>d</sup>June 10: One set each at Middle Set and Red Bluff, two sets at Popof Head. The total does not include about 50 sockeye salmon lost over the corks.

<sup>&</sup>lt;sup>e</sup>June 11: One set each at Popof Head, Middle Set, and Red Bluff.

Table 27. South Unimak June salmon harvest, all gears combined, season total by day, 1993.

Cat	ch_			<del></del>		Nun	ber of Sal	mon	
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
June	13	199	213	1,223	283,755	1	565	37,965	323,509
	15	175	193	593	254,913	3	1,258	45,075	301,842
	16	192	206	644	305,140	0	771	43,503	350,058
	17	223	235	412	303,746	1	1,097	38,717	343,973
	19	195	221	411	350,272	7	4,829	51,147	406,666
	20	208	260	614	491,975	18	5,815	67,705	566,127
	22	205	212	342	202,662	10	6,880	72,862	282,756
	26	26	27	118	50,191	18	3,883	3,313	57,523
	27	62	63	195	111,836	214	8,586	12,674	133,505
	29	51	51	35	12,083	234	4,051	8,980	25,383
Total		245	1,681	4,587	2,366,573	506	37,735	381,941	2,791,342

Table 28. South Unimak June salmon harvest by purse seine gear, season total by day, 1993.

Cat	Catch			Number of Salmon								
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total			
June	13	67	74	879	140,029	1	565	22,889	164,363			
	15	41	43	364	114,996	3	1,258	27,342	143,963			
	16	55	55	322	183,261	0	770	24,664	209,017			
	17	75	76	184	189,951	0	1,096	22,451	213,682			
	19	50	51	232	189,804	0	4,829	32,228	227,093			
	20	76	79	405	325,638	0	5,812	49,542	381,397			
	22	74	75	232	100,368	1	6,867	49,340	156,808			
	26	11	12	102	39,783	7	3,879	3,021	46,792			
	27	43	43	192	103,361	193	8,582	12,491	124,819			
	29	40	40	31	10,290	229	4,051	8,830	23,431			
Total		84	548	2,943	1,397,481	434	37,709	252,798	1,691,365			

Table 29. South Unimak June salmon harvest by drift gillnet gear, season total by day, 1993.

Cat	tch_				····	Numb	er of Salı	mon	
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum .	Total
June	13	115	120	288	132,660	0	0	13,927	146,875
	15	116	128	165	129,195	0	0	16,062	145,422
	16	122	132	263	113,482	0	1	17,675	131,421
	17	132	142	216	110,931	1	1	15,785	126,934
	19	134	156	154	156,374	6	0	17,918	174,452
	20	113	151	155	155,555	12	2	16,255	171,979
	22	116	121	106	98,243	9	13	22,851	121,222
	26	6	6	4	4,396	2	0	207	4,609
	27	6	6	0	1,292	2	0	82	1,376
	29	*	*	*	*	*	*	*	*
Total		140	964	1,351	902,788	32	17	120,820	1,025,008

<sup>\*</sup> Confidentiality requirements prohibit reporting harvest by day.

Table 30. South Unimak June salmon harvest by set gillnet gear, season total by day, 1993.

Ca1	Catch			Number of Salmon							
Month	Date	Permits L	andings	Chinook	Sockeye	Coho	Pink	Chum	Total		
June	13	17	19	56	11,066	0	0	1,149	12,271		
	15	18	22	64	10,722	0	0	1,671	12,457		
	16	16	19	59	8,397	0	0	1,164	9,620		
	17	16	17	12	2,864	0	0	481	3,357		
	19	11	14	25	4,094	1	0	1,001	5,121		
	20	19	30	54	10,782	6	1	1,908	12,751		
	22	15	16	4	4,051	0	0	671	4,726		
	26	9	9	12	6,012	9	4	85	6,122		
	27	13	14	3	7,183	19	4	101	7,310		
	29	9	9	4	1,133	5	0	92	1,234		
	Total	22	169	293	66,304	40	9	8,323	74,969		

Table 31. South Unimak and Shumagin Islands sockeye and chum salmon daily catches, all gear combined, 1993.

	South Sockeye	Unimak Chum	<u>Shumagi</u> Sockeye	n Islands Chum	
June 1-12	Closed to Co	ommercial Sa	lmon Fishing		
13	283,755	37,965	91,570	9,720	
14					
15	254,913	45,075	52,616	9,750	
16	305,140	43,503			
17	303,746	38,717	35,067	3,831	
18					
19	350,272	51,147	54,102	7,749	
20	491,975	67,705	72,281	10,966	
21			135,476	15,031	
22	202,662	72,862			
23					
24					
25					
26	50,191	3,313	66,740	37,653	
27	111,836	12,674			
28			99,319	55,606	
29	12,083	8,980			
30	•	·			
Total	2,366,573	381,941	607,171	150,306	

Shumagin Islands Section salmon harvest, all gears combined, season total by day,

cat	ch		_	Number of Salmon							
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total		
June	7ª	1	1	32	1,059	0	0	231	1,322		
	8ª	1	1	28	998	0	5	122	1,153		
	9 a	1	1	8	1,272	0	0	354	1,634		
	10	1	1	14	987	0	24	110	1,135		
	11	_1	1	4	393	0	11	206	614		
	13	77	85	828	91,570	0	730	9,720	102,848		
	15	50	50	482	52,616	0	933	9,750	63,781		
	17 19	65 54	73 55	281 299	35,067	1	855	3,831	40,035		
	20	54 68	82	453	54,102 72,281	0	1,987 2,579	7,749 10,966	64,137 86,279		
	21	76	87	737	135,476	7	7,138	15,031	158,389		
	26	61	67	395	66,740	109	9,376	37,653	114,273		
	28	80	82	1,404	99,319	610	19,803	55,606	176,742		
July	7 <sup>b</sup>	4	4	0	0	0	0	1,462	1,462		
-	12ª	1	1	43	469	728	516	172	1,928		
	13ª	1	1	29	459	164	352	226	1,230		
	14 <sup>b</sup>	2	2	0	0	0	178	4,300	4,478		
	15°	1	1	23	203	454	421	103	1,204		
	16ª	1	1	22	155	808	315	49	1,349		
	17ª	1	1	80	298	2,005	856	164	3,403		
	18ª	1	1	47	177	733	484	113	1,554		
	20	27	28	79	12,233	2,725	39,792	4,623	59,452		
	21	55	58	221	20,747	18,214	119,949	12,530	171,661		
	22 26	88	110 58	408	45,005	20,170	215,215	24,046	304,844		
	27	46 45	58 57	201 242	20,977 18,904	11,357 10,576	155,091	7,569 7,352	195,195 226,248		
	28	56	66	231	14,718	12,149	189,174 254,628	9,573	291,299		
Aug	1	21	25	71	4,217	2,154	125,938	2,520	134,900		
	2	29	33	173	5,481	5,326	280,551	3,656	295,187		
	3	32	37	174	7,215	5,914	234,114	5,010	252,427		
	6	27	30	124	3,483	4,542	149,449	4,556	162,154		
	7	22	27	71	6,719	4,377	274,989	5,235	291,391		
	8	27	34	48	5,002	2,576	156,889	5,656	170,171		
	11	30	36	74	3,767	2,859	187,635	3,312	197,647		
	12	28	35	62	2,992	2,301	131,033	2,500	138,888		
	13	34	35	89	1,505	2,781	111,828	2,001	118,204		
	16	30	39	11	1,797	1,801	75,193	2,026	80,828		
	17	31	34	13	3,106	2,343	148,258	2,640	156,360		
	18	20	23	13 5	1,805	1,521	118,168	1,591	123,098		
	19 20	23 21	28 28	12	2,602	2,443	104,708	3,549	113,307		
	21	22	25	6	1,990 1,315	1,412 1,589	76,712 91,287	1,938	82,064		
	22	16	21	2	777	519	29,508	1,645 373	95,842 31,179		
	23	12	16	1	853	243	31,423	113	32,633		
	24	10	12	ō	887	282	14,234	255	15,658		
	25	13	14	ō	1,261	554	8,964	213	10,992		
	26	9	9	ō	947	160	1,622	169	2,898		
Sept	1	4	5	0	164	103	0	46	313		
	2	9	13	1	629	310	0	112	1,052		
	3	12	16	2	2,040	846	0	274	3,162		
	6	*	*	*	*	*	*	*	*		
	7	6	10	0	455	352	0	78	885		
	8	5	8	0	262	201	0	39	502		
	9	4	4	0	192	69	0	18	279		
	10	6	8	0	621	445	0	48	1,114		
	13	4	4	0	335	719	0	22	1,076		
	14	3 6	4 7	0	175	126	0	31	332		
	15 17	۵ *	, *	*	248	195 *	0	13	456		
	20	*	*	*	*	*	*	*	*		
	24	*	*	*	*	*	*	*	*		
								-			

<sup>&</sup>lt;sup>a</sup>Test Fish harvest.

bOnly Zachary Bay and Stepovak Flats Section were open to commercial fishing.

\* Confidentiality requirements prohibit reporting harvest by day.

Shumagin Islands Section salmon harvest by purse seine gear, season total by day, Table 33. 1993.

Cat	ch					Numbe	r of Salmon		
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
June	13	42	42	787	83,466	0	727	9,226	94,206
	15	40	40	468	48,872	0	912	9,611	59,863
	17	35	35	249	24,832	1	852	3,327	29,261
	19	25	25	285	49,663	0	1,983	7,409	59,340
	20	27	30	438	60,602	0	2,573	10,520	74,133
	21	34	38	701	118,860	5	7,111	14,547	141,224
	26	45	45	382	56,860	8.8	9,373	37,190	103,893
	28	42	42	1,385	88,103	577	19,797	55,330	165,192
July	7ª	3	3	0	0	0	0	1,453	1,453
	14ª	*	*	*	*	*	*	*	*
	20	20	20	78	11,267	2,656	38,014	4,276	56,291
	21	38	38	214	16,801	17,967	116,122	11,905	163,009
	22	51	55	384	27,265	18,920	203,065	22,591	272,225
	26	30	31	195	10,216	10,947	145,900	6,495	173,753
	27	29	31	235	12,510	10,061	180,136	6,612	209,554
~	28	38	41	229	7,626	11,540	245,066	8,291	272,752
lug	1	10	13	67	2,968	1,653	120,877	2,249	127,814
	2	21	22	170	4,368	4,820	274,635	3,384	287,377
	3	25	25	170	5,435	5,618	227,311	4,601	243,135
	6	18	18	122	1,984	4,170	142,203	3,982	152,461
	7	14	17	71	5,191	3,925	269,919	4,825	283,931
	8	18	19	47	2,259	2,062	148,683	4,960	158,011
	11	20	21	74	2,903	2,489	183,642	2,837	191,945
	12	14	17	62	1,604	1,819	123,115	2,085	128,685
	13	22	22	88	961	2,384	108,834	1,743	114,010
	16	10	11	11	880	1,198	67,769	1,520	71,378
	17	15	15	13	1,978	1,893	141,233	2,314	147,431
	18	9	10	11	1,291	1,317	115,484	1,430	119,533
	19	11	12	5	1,677	1,984	101,579	3,305	108,550
	20	14	16	10	1,086	1,052	72,622	1,743	76,513
	21	14	16	6	693	1,330	88,563	1,463	92,055
	22	4	4	1	51	83	25,544	134	25,813
	23	3	4	0	0	0	27,830	0	27,830
	24	*	*	*	*	*	*	*	*
	25	*	*	*	*	*	*	*	*
otal		69	783	6,958	652,272	110,559	3,230,159	255,658	4,255,606

<sup>a Only Zachary Bay and Stepovak Flats Section were open to commercial fishing.
\* Confidentiality requirements prohibit reporting harvest by day.</sup> 

Shumagin Islands Section salmon harvest by set gillnet gear, season total by day, Table 34. 1993.

Cat	ch		<del></del>			Numbe:	r of Salmon		
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
June	13	35	43	41	8,104	0	3	494	8,642
	15	10	10	14	3,744	0	21	139	3,918
	17	30	38	32	10,235	0	3	504	10,774
	19	29	30	14	4,439	0	4	340	4,797
	20	41	52	15	11,679	0	6	446	12,146
	21	42	49	36	16,616	2	27	484	17,165
	26	16	22	13	9,880	21	3	463	10,380
	28	38	40	19	11,216	33	6	276	11,550
July	7ª	*	*	*	*	*	*	*	*
-	20	7	8	1	966	69	1,778	347	3,161
	21	17	20	7	3,946	247	3,827	625	8,652
	22	37	55	24	17,740	1,250	12,150	1,455	32,619
	26	16	27	6	10,761	410	9,191	1,074	21,442
	27	1.6	26	7	6,394	515	9,038	740	16,694
	28	18	25	2	7,092	609	9,562	1,282	18,547
Aug	1	11	12	4	1,249	501	5,061	271	7,086
3	2	8	11	3	1,113	506	5,916	272	7,810
	3	7	12	4	1,780	296	6,803	409	9,292
	6	9	12	2	1,499	372	7,246	574	9,693
	7	8	10	0	1,528	452	5,070	410	7,460
	8	9	15	i	2,743	514	8,206	696	12,160
	11	10	15	õ	864	370	3,993	475	5,702
	12	14	18	ō	1,388	482	7,918	415	10,203
	13	12	13	i	544	397	2,994	258	4,194
	16	20	28	0	917	603	7,424	506	9,450
	17	16	19	ő	1,128	450	7,025	326	8,929
	18	11	13	2	514	204	2,684	161	3,565
	19	12	16	ō	825	459	3,129	244	4,757
	20	7	12	2	904	360	4,090	195	5,551
	21	8	9	ō	622	259	2,724	182	3,787
	22	12	17	1	726	436	3,964	239	5,366
	23	9	16	ī	853	243	3,593	113	4,803
	24	8	10	ō	887	282	2,327	255	3,751
	25	12	13	ŏ	1,261	554	2,364	213	4,392
	26	9	9	ő	947	160	1,622	169	2,898
Sept	1	4	5	ő	164	103	0	46	313
bcpc	2	9	13	1	629	310	Ö	112	1,052
	3	12	16	2	2,040	846	0	274	3,162
	6	*	*	*	2,040	*	*	*	3,102
	7	6	10	0	455	352	0	78	885
	8	5	8	Ö	262	201	0	39	502
	9	4	4	0	192	69	0	18	279
	10	6	8	0	621	445	0	48	1,114
	13	4	4	0	335	719	0	22	1,114
	14	3	4	0	335 175	126	0	31	332
	15	6	7	0			0		456
	15 17	6 *	*		248	195 *	υ *	13	456
	20	*	*	*	*	*	*	*	*
	24	*	*	*	*	*	*	*	*
Total		127	1,599	7,543	809,092	130 042	3,372,915	273,258	4,592,850

<sup>&</sup>lt;sup>a</sup>Only Zachary Bay and Stepovak Flats Section were open to commercial fishing. \* Confidentiality requirements prohibit reporting harvest by day.

Table 35. South Peninsula (Shumagin and Unimak) June fisheries, sockeye salmon catch<sup>a</sup> by gear, 1970-93.

	Purse	Seine	_Drift_(	Gillnet_	Set G	illnet	<del></del>
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	845,597	51.2	785,174	47.6	19,363	1.2	1,650,134
1971	142,251	30.8	315,685	68.3	4,165	0.9	462,101
1972	125,242	25.0	373,618	74.5	2,337	0.5	501,197
1973	41,411	16.9	200,258	81.6	3,881	1.6	245,550
1974	0	0.0	0	0.0	. 0	0.0	. 0
1975	91,768	38.2	146,937	61.2	1,394	0.6	240,099
1976	109,089	35.7	190,256	62.3	5,882	1.9	305,227
1977	73,277	30.3	164,165	68.0	4,150	1.7	241,592
1978	143,047	29.4	339,295	69.7	4,493	0.9	486,835
1979	639,986	75.2	196,482	23.1	14,964	1.8	851,432
1980	2,544,107	79.3	631,975	19.7	30,193	0.9	3,206,275
	1,078,047	59.2	693,166	38.1	49,922	2.7	1,821,135
	1,341,224	63.3	745,616	35.2	31,861	1.5	2,118,701
	1,339,868	68.3	599,152	30.5	23,951	1.2	1,962,971
1984	959,821	69.1	403,582	29.1	24,800	1.8	1,388,203
	1,210,653	67.6	553,558	30.9	27,189	1.5	1,791,400
1986	279,960	59.4	162,950	34.6	28,487	6.0	471,397
1987	345,028	43.4	401,215	50.5	47,860	6.0	794,103
1988	344,801	45.6	317,818	42.0	94,068	12.4	756,687
	1,161,809	66.6	512,522	29.4	70,174	4.0	1,744,505
1990	837,635	62.2	452,484	33.6	56,176	4.2	1,346,295
1991	919,000	59.3	539,490	34.8	90,440	5.8	1,548,930
	1,566,460	63.7	765,752	31.2	125,644	5.1	2,457,856
1993	1,928,739	64.9	902,788	30.4	142,217	4.8	2,973,744
1970-	93 Average	<u> </u>					
	752,868	61.5	433,081	35.4	37,650	3.1	1,223,599
1984-	93 Average						
	955,391	62.6	501,216	32.8	70,706	4.6	1,527,312

<sup>&</sup>lt;sup>a</sup> Harvest numbers do not include test fish catches.

Table 36. South Peninsula (Shumagin and Unimak) June fisheries, chum salmon catch<sup>a</sup> by gear, 1970-93.

	Purse	Seine	Drift G	illnet_	Set G	<u>illnet</u>	
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	168,520	38.1	269,844	61.1	3,548	0.8	441,912
1971	179,588	35.3	326,267	64.1	3,342	0.7	509,197
1972	144,604	27.9	372,635	71.8	1,590	0.3	518,829
1973	33,351	16.6	165,753	82.6	1,526	0.8	200,630
1974	0	0.0	0	0.0	0	0.0	0
1975	53,447	53.0	46,447	46.1	928	0.9	100,822
1976	119,569	29.1	288,300	70.3	2,478	0.6	410,347
1977	31,530	27.2	84,052	72.4	532	0.5	116,114
1978	28,003	23.0	93,115	76.4	790	0.6	121,908
1979	58,203	55.9	44,051	42.3	1,852	1.8	104,106
1980	412,350	81.0	94,900	18.6	1,615	0.3	508,865
1981	377,168	66.9	184,586	32.7	2,228	0.4	563,982
1982	590,179	53.9	501,282	45.8	3,583	0.3	1,095,044
1983	574,300	73.1	209,600	26.7	1,546	0.2	785,446
1984	245,605	72.9	90,498	26.8	1,017	0.3	337,120
1985	230,432	53.1	198,361	45.7	5,036	1.2	433,829
1986	204,746	58.2	141,299	40.2	5,724	1.6	351,769
1987	190,064	42.9	247,934	55.9	5,143	1.2	443,141
1988	207,049	39.3	305,967	58.1	13,695	2.6	526,711
1989	256,808	56.4	192,650	42.3	5,705	1.3	455,163
1990	322,701	62.2	190,002	36.6	6,036	1.2	518,739
1991	505,790	65.5	256,132	33.1	10,783	1.4	772,705
1992	303,226	71.1	115,401	27.1	7,576	1.8	426,203
1993	399,958	75.1	120,820	22.7	11,469	2.2	532,247
1970-	93 Average						
1970-	234,883	54.9	189,162	44.2	4,073	1.0	428,118
1984-	93 Average						
	286,638	59.7	185,906	38.7	7,218	1.5	479,763

<sup>&</sup>lt;sup>a</sup> Harvest numbers do not include test fish catches.

Table 37. South Unimak and Shumagin Islands June fisheries<sup>a</sup>, sockeye to chum salmon ratios, all gear combined, 1960-93.

	South Unimak			Shuma	gin Islan	ds		Total	_
Year	Sockeye	Chum	Ratio	Sockeye	Chum	Ratio	Sockeye	Chum	Ratio
1960	137,000	84,000	1.63	19,000	11,000	1.73	156,000	95,000	1.64
1961	199,000	157,000	1.27	55,000	36,000	1.53	254,000	193,000	1.32
1962	272,000	209,000	1.30	54,000	61,000	0.89	326,000	270,000	1.21
1963	116,000	36,000	3.22	33,000	36,000	0.92	149,000	72,000	2.07
1964	159,000	161,000	0.99	85,000	67,000	1.27	244,000	228,000	1.0
965	568,000	121,000	4.69	207,000	45,000	4.60	775,000	166,000	4.6
1966	528,000	215,000	2.46	54,000	17,000	3.18	582,000	232,000	2.53
967	186,000	73,000	2.55	69,000	51,000	1.35	255,000	124,000	2.00
1968	342,000	115,000	2.97	233,000	51,000	4.57	575,000	166,000	3.46
1969	781,000	254,000	3.07	76,000	13,000	5.85	857,000	267,000	3.2
	1,510,399	397,000	3.80	139,735	44,909	3.11	1,650,134	441,909	3.73
1971	422,760	405,311	1.04	39,341	103,886	0.38	462,101	509,197	0.9
1972	426,799	411,019	1.04	74,398	107,810	0.69	501,197	518,829	0.9
1973	222,586	177,720	1.25	22,964	22,910	1.00	245,550	200,630	1.2
1974	222,300	0	1.23	22,504	22,510	1.00	243,330	200,030	4.2.
.975	190,774	65,279	2.92	49,325	35,543	1.39	240,099	100,822	2.3
.976	233,211	336,238	0.69	72,016	74,109	0.97	305,227	410,347	0.74
1977	195,680	94,215	2.08	45,912	21,899	2.10	241,592	116,114	2.0
.978	418,959	103,429	4.05	67,876	18,479	3.67	486,835	121,908	3.9
.979	672,293	63,153	10.65	179,139	40,953	4.37	851,432	104,106	8.1
	2,731,148	458,499	5.96	475,127	50,366	9.43	3,206,275	508,865	6.3
	1,470,563	509,911	2.88	350,572	54,071	6.48	1,821,135	563,982	3.2
	1,668,153	933,728	1.79	450,548	161,316	2.79	2,118,701	1,095,044	1.93
	1,547,369	616,390	2.51	416,494	169,277	2.46	1,963,863	785,667	2.5
	1,131,365	227,913	4.96	256,838	109,207	2.35	1,388,203	337,120	4.1
	1,454,969	324,825	4.48	336,431	109,004	3.09	1,791,400	433,829	4.1
L986	315,370	252,721	1.25	156,027	99,048	1.58	471,397	351,769	1.34
L987	653,536	406,077	1.61	140,567	37,046	3.79	794,103	443,141	1.79
.988	474,457	464,765	1.02	282,230	61,946	4.56	756,687	526,711	1.44
	1,347,547	407,635	3.31	396,958	47,528	8.35	1,744,505	455,163	3.83
	1,090,710	455,238	2.40	255,649	63,517	4.02	1,346,359	518,755	2.60
	1,216,035	670,409	1.81	337,115	105,711	3.19	1,553,150	776,120	2.00
	2,046,022	323,891	6.32	416,653	103,711	4.00	2,462,675	428,136	5.7
	2,366,573	381,941	6.20	611,880	151,329	4.04	2,462,673	533,270	5.5
		301,341	0.20	011,000		4.04			
.960-9	3 Average								
	796,920	291,538	2.73	189,965	64,180	2.96	986,885	355,719	2.7
1984-9	3 Average								
1	1,209,658	391,542	3.09	319,035	88,860	3.59	1,528,693	480,401	3.18

<sup>&</sup>lt;sup>a</sup> Numbers of salmon include test fish catches.

Table 38. South Unimak and Shumagin Islands June fisheries, sockeye per chum salmon ratio by gear type, 1980-93.

		South	Unimak	· · · · · · · · · · · · · · · · · · ·		Shumagin Isla	nds
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total	Purse Seine	Set Gillnet	Total
1980	5.7	6.7	55.0	6.0	9.4	12.4	9.4
1981	2.3	3.8	21.0	2.8	6.2	25.4	6.5
1982	2.1	1.5	11.1	1.8	2.7	6.7	2.8
1983	2.3	2.9	14.9	2.5	2.4	16.3	2.5
1984	5.2	4.5	36.4	5.0	2.2	19.2	2.4
1985	7.1	2.8	14.8	4.3	3.0	4.0	3.1
1986	1.3	1.2	6.7	1.2	1.4	4.7	1.6
1987	1.5	1.6	5.2	1.6	3.1	13.8	3.8
1988	0.9	1.0	5.2	1.0	4.0	7.3	4.6
1989	3.8	2.7	12.7	3.3	8.1	11.9	8.4
1990*	2.4	2.4	11.3	3.5	3.7	8.6	4.0
1991*	1.6	2.1	6.5	1.8	2.8	9.5	3.2
1992*	5.8	6.6	23.3	6.3	3.8	9.9	4.0
1993ª	5.5	7.5	8.0	6.2	3.6	24.1	4.0

<sup>&</sup>lt;sup>a</sup>Gear depth limitations in effect.

Table 39. South Unimak and Shumagin Islands June fisheries, composition of sockeye and chum salmon harvests in percent by gear type, 1984-93.

			South Unima	k				Shumagin	Islands	
		Sockeye	· · · · · · · · · · · · · · · · · · ·		Chum	-	So	ckeye	Cl	num
Year	Purse Seine	Drift Gillnet	Set Gillnet	Purse Seine	Drift Gillnet	Set Gillnet	Purse Seine	Set Gillnet	Purse Seine	Set Gillnet
1980	76.4	23.1	0.5	79.3	20.7	0.1	96.4	3.6	97.3	2.7
1981	50.7	47.1	2.2	63.5	36.2	0.3	94.8	5.2	98.7	1.3
1982	54.1	44.7	1.1	46.1	53.7	0.2	97.3	2.7	98.6	1.1
1983	60.4	38.7	0.9	65.8	34.0	0.1	97.4	2.6	99.6	0.4
1984	63.4	35.7	1.0	60.2	39.7	0.1	94.7	5.3	99.3	0.7
1985	61.3	38.1	0.7	38.7	61.1	0.2	94.8	5.2	96.0	4.0
1986	46.7	51.7	1.6	43.8	55.9	0.3	85.0	15.0	95.0	5.0
1987	36.5	61.4	2.2	38.3	61.1	0.7	76.0	24.0	93.4	6.6
1988	29.8	67.0	3.2	33.5	65.8	0.6	72.1	27.9	82.6	17.4
1989	59.4	38.0	2.5	52.1	47.3	0.7	90.9	9.1	93.6	6.4
1990ª	56.8	41.5	1.7	57.9	41.7	0.4	85.3	14.7	93.1	6.9
1991	53.5	44.4	2.1	61.2	38.2	0.6	80.6	19.4	93.3	6.7
1992ª	58.3	37.4	4.3	63.2	35.6	1.2	90.9	9.1	96.3	3.7
1993 <b>ª</b>	59.1	38.2	2.8	66.2	31.6	2.2	87.5	12.5	97.9	2.1
1984-93	Average 52.5	45.3	2.2	51.5	47.8	0.7	84.8	15.2	92.8	7.2

<sup>&</sup>lt;sup>a</sup> Gear depth limitations in effect.

Table 40. Salmon gear in South Peninsula waters during June, 1976-93.<sup>a</sup>

			Gear	
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total
1970	39	156	16	202
1971	37	122	. 8	166
1972	32	150	7	185
1973	16	121	7	142
1974	0	0	0	
1975	20	81	8	108
1976	25	108	16	147
1977	17	101	13	131
1978	23	120	16	159
1979	40	132	26	196
1980	68	129	29	225
1981	83	135	25	243
1982	90	138	23	251
1983	100	146	35	282
1984	101	147	32	280
1985	107	150	48	305
1986	99	156	43	298
1987	86	144	60	290
1988	90	148	63	301
1989	99	145	61	305
1990	109	153	59	322
1991	112	157	65	335
1992	112	141	68	322
1993	116	140	72	328
1984-93 A	verage			
	103.1	148.1	57.1	308.6

<sup>&</sup>lt;sup>a</sup> During the peak of the South Peninsula June fishery, (June 12-26), approximately 40-50 purse seine permit holders fish the Shumagin Islands Section fishery. During the few occasions when the South Unimak fishery is open and the Shumagin Islands fishery is closed, nearly the entire purse seine fleet fishes at South Unimak. Drift gillnet effort declines after June 20 as the fleet begins moving to the Port Moller fishery.

Table 41. South Peninsula post June, July 5-December 31, salmon harvest by species, all gear combined, 1970-93.

		_	Chin	ook	Sock	eye	Coh	0	Pink	c	Chu	m	Tota	al
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	120	1,486	748	12,316	34,520	234,777	32,501	250,296	1,625,413	6,494,983	539,814	3,238,798	2,232,996	10,231,17
1971	157	2,030	1,235	20,189	130,771	784,394	16,899	114,918	1,420,646	4,830,372	753,082	4,894,769	2,322,633	10,644,64
1972	135	796	657	10,458	35,392	229,221	7,976	55,968	59,640	237,675	185,564	1,166,341	289,229	1,699,66
1973	78	486	125	1,307	32,331	244,663	6,397	41,723	35,783	138,131	70,335	562,264	144,971	988,08
1974	80	477	463	4,060	78,761	515,334	9,307	63,114	97,530	386,094	48,332	368,340	234,393	1,336,94
1975	46	90	0	0	3,449	22,935	66	329	55,395	218,720	29,928	191,093	88,838	433,07
1976	93	1,115	5	70	13,693	87,647	213	1,442	2,342,027	10,219,273	118,659	891,969	2,474,597	11,200,40
1977	103	1,315	35	1,111	60,669	475,574	2,108	15,125	1,443,245	5,735,742	126,762	1,029,859	1,632,819	7,257,41
1978	123	2,163	220	4,592	70,015	448,425	60,771	373,716	5,500,069	18,660,692	423,056	3,236,170	6,054,131	22,723,59
1979	161	2,605	1,020	14,890	259,102	1,755,767	356,400	2,405,363	6,396,327	23,207,398	370,973	2,722,202	7,383,822	30,105,62
1980	152	2,761	1,489	18,289	270,071	1,657,390	273,294	1,551,482	6,255,096	20,668,249	817,049	5,428,218	7,616,999	29,323,62
1981	168	2,848	4,403	52,457	303,942	2,016,882	161,897	1,078,008	4,580,142	16,922,850	1,168,353	8,470,205	6,218,737	28,540,40
1982	183	3,304	2,539	36,406	171,438	1,116,942	254,363	1,783,362	5,009,333	17,147,610	1,167,186	9,093,364	6,604,859	29,177,68
1983	201	3,190	12,810	105,598	521,405	3,569,566	127,157	907,284	2,771,640	10,509,106	915,740	6,388,803	4,348,752	21,480,35
1984	215	4,060	4,790	69,461	471,151	3,061,418	310,862	2,198,377	10,665,171	40,006,903	1,296,379	9,406,859	12,748,353	54,743,01
1985	213	2,970	724	14,620		1,696,473	170,046	1,194,371	4,323,885	17,702,036	912,580	6,293,231	5,702,017	26,900,73
1986	202	3,444	3,586	51,098	687,525	4,730,236	235,852	1,525,159	3,739,423	12,879,800	1,394,332	6,060,718	6,060,718	25,247,01
1987	233	2,926	3,935	51,113	463,090	3,281,501	224,740	1,586,457	1,191,512	4,172,340	929,782	6,764,977	2,813,059	15,856,38
1988	243	4,701	7,011	103,894	716,964	4,807,304	505,278	3,607,999	6,864,600	24,631,178	1,381,796	9,475,649	9,475,649	42,626,02
1989	275	4,191	4,281	69,198	911,092	5,800,621	443,843	2,984,843		26,853,130	538,916	3,712,047	8,991,555	39,419,83
1990	262	3,670	6,187	83,256	1,040,231	6,898,466	307,217	2,133,429	2,350,518	7,669,200	718,399	4,565,324	4,422,552	21,349,67
1991	235	3,902	3,117	42,257	574,089	3,591,857	317,041	1,944,577	9,987,475	31,680,654	804,564	5,387,761	11,686,286	42,647,10
1992	234	4,330	4,133	55,255		5,467,915		2,686,541		30,968,830	884,505	6,050,606	11,306,712	
1993	222	3,627	4,541	51,591	633,176	3,975,230	218,910	1,342,966	9,846,902	33,127,764	514,392	3,374,370	11,217,921	41,871,92
verage	s								·····					
974-93		2,884	3,264	41,461	420.878	2,748,874	219.879	1,469,197	4.982.033	17,668,378	728.084	4,945,588	6,354,138	26,873,49
984-93		3,782	4,231	59,174		4,331,102		2,120,472		22,969,184	937,565	6,109,154	8,442,482	

Table 42. South Peninsula post June, July 5-December 31, salmon harvest by species, purse seine gear, 1970-93.

			Chi	nook	Sock	eye	Coh	<u>o</u>	Pink		Chu	m	Tot	al
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	103	1,217	734	11,977	18,038	122,689	31,774	244,693	1,547,072	6,181,619	493,201	2,959,120	2,090,819	9,520,098
1971	110	1,563	1,177	19,257	52,073	312,438	16,344	111,164	1,412,730	4,803,451	689,497	4,481,364	2,171,821	9,727,674
1972	83	539	640	10,240	18,196	123,741	7,783	54,481	55,335	221,340	142,895	861,610	224,849	1,271,412
1973	52	292	122	1,237	10,216	73,398	6,137	40,138	32,480	124,189	61,788	496,520	110,743	735,482
1974	43	209	439	3,744	39,900	237,996	8,066	54,680	86,828	340,283	41,138	313,994	176,371	950,697
1975	39	76	0	0	1,642	10,435	37	177	54,435	214,793	29,336	187,427	85,450	412,832
1976	81	1,081	3	40	8,182	47,856	53	322	2,336,801	10,195,824	117,347	881,813	2,462,386	11,125,855
1977	82	1,117	18	519	32,051	237,189	1,034	7,487	1,427,176	5,669,726	114,058	930,832	1,574,337	6,845,753
1978	99	1,916	204	4,125	57,448	355,158	57,842	348,351	5,470,855	18,554,640	403,352	3,085,806	5,989,701	22,348,080
1979	120	2,110	964	13,636	177,083 1	,168,081	345,889	2,326,003	6,294,204	22,815,774	339,425	2,495,631	7,157,565	28,819,125
1980	110	2,052	1,421	17,105	166,564	962,572	249,569	1,390,968	6,156,029	20,316,731	732,417	4,858,313	7,306,000	27,545,689
1981	113	1,978	4,272	50,423	170,171 1	,074,493	155,651	1,033,521	4,460,485	16,444,705	1,072,987	7,793,392	5,863,566	26,396,534
1982	105	2,029	2,284	32,156	90,283	551,042	219,027	1,529,931	4,845,830	16,537,914	1,058,393	8,274,102	6,215,817	26,925,145
1983	114	1,837	12,529	101,994	257,638 1	,726,358	109,822	767,327	2,688,083	10,165,987	828,228	5,747,170	3,896,300	18,508,836
1984	116	2,305	4,335	62,428	240,959 1	,492,899	247,342	1,740,438	10,321,564	38,642,974	1,174,269	8,513,742	11,988,469	50,452,481
1985	119	1,646	625	12,617	178,953	994,263	128,931	886,606	4,096,285	16,707,245	828,645	5,713,447	5,233,439	24,314,178
1986	114	1,820	3,395	47,453	412,251 2	796,045	203,505	1,303,152	3,602,769	12,351,525	1,300,638	9,581,873	5,522,558	26,080,048
1987	111	1,289	3,700	46,637	238,678 1	,702,096	169,763	1,194,369	1,135,252	3,947,340	811,464	5,929,149	2,358,857	12,819,591
1988	111	2,175	6,586	96,049	423,852 2	,776,157	389,723	2,746,365		22,893,498	1,228,987	9,373,114	8,476,971	37,885,183
1989	117	1,644	3,584	58,010	470,465 2	2,868,983	305,558	2,028,673	6,641,815	25,045,797	417,978	2.851.543	7,839,400	32,853,006
1990	117	1,459	5,605	74,746	524,630 3		224,354	1,544,590		7,336,629	600,040	3,737,283	3,611,466	16,111,848
1991	118	1,705	2,085	29,074	232,338 1	396.231	199.104	1,178,299	9.614.533	30,360,543	635,031	4,252,502	10,683,091	37,216,649
1992	115	1,861	3,724	49,221	443,201 2			1,837,070		29,081,438	776,939	5,296,761	10,134,897	
1993	101	1,594	3,666	41,813	288,648		148,565	881,669		31,870,618	448,204	2,934,614	10,383,746	
Average	s			· · · ·						<del></del>	78-88-WF 19	***************************************	<del>, ,, , , , , , , , , , , , , , , , , ,</del>	
1974-93		1,595	2,972	37,090	222,747 1	.412.619	172.897	1,140,000	4.801.460	16,974,699	647.944	4,637,625	5,848,019	24.202.033
1984-93		1,750	3,731	51,805	345,398 2			1,534,123		21,823,761	822,220	5,818,403	7,623,289	

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Table 43. South Peninsula post June, July 5-December 31, salmon harvest by species, drift gillnet gear, 1970-93.

			Ch	inook	So	ckeye	Co.	ho	Pink	<u> </u>	Chu	.m	То	tal
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	45	101	9	219	3,548	24,130	55	425	62,261	249,044	26,261	157,566	92,134	431,384
1971	78	265	25	396	47,694	285,932	351	2,361	1,100	3,751	48,525	315,447	97,695	607,887
1972	53	138	5	102	8,598	52,431	54	418	99	391	31,667	224,519	40,423	277,861
1973	17	22	0	0	1,632	11,413	21	103	40	170	1.089	7,464	2,782	19,150
1974	25	69	6	103	7,135	39,221	1,089	7,317	1,413	5,808	2,055	14,709	11,698	67,158
1975	0	0	Ō	0	0	0	0	. 0	0	0	0	0	. 0	. 0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	Ó	0
1978	Ó	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	12	18	0	0	31	212	3	20	16,571	57,375	2,241	14,684	18,846	72,291
1980	2	2	0	0	398	1,787	0	0	12	40	. 8	61	418	1,888
1981	7	8	0	0	1,388	8,900	10	75	7,200	24,661	4,821	36,313	13,419	69,949
1982	29	159	90	1,430	13,472	79,319	19,202	128,100	50,748	178,388	17,406	121,090	100,918	508,327
1983	30	128	78	938	19,005	110,974	3,658	26,987	5,586	21,517	19,913	130,959	48,240	291,375
1984	37	315	161	1,810	26,698	155,725	37,805	256,677	78,575	277,356	30,941	214,201	174,180	905,769
1985	33	185	24	388	18,441	100,404	18,033	128,908	21,803	81,783	18,521	127,118	76,822	438,601
1986	29	243	24	426	30,261	188,120	18,901	127,804	27,772	97,533	22,294	161,721	99,252	575,604
1987	54	285	64	1,088	39,360	245,037	30,445	207,212	3,025	9,726	43,115	289,452	116,009	752,515
1988	63	582	142	2,239	44,657	278,880	75,445	544,686	145,106	569,528	68,066	511,463	333,416	1,906,796
1989	81	590	295	4,712	86,343	522,325	88,376	601,217	85,946	326,002	44,605	322,433	305,565	1,776,689
1990	64	533	122	1,874	132,907	898,207	42,659	285,936	32,089	119,573	46,700	337,679	254,477	1,643,269
1991	43	237	62	895	21,721	130,072	51,215	304,640	26,740	101,494	25,465	167,437	125,203	704,238
1992	42	312	47	678	44,935	268,484	58,621	380,270	91,106	327,873	29,252	203,113	223,961	1,180,418
1993	41	215	111	1,372	23,421	138,858	26,364	161,800	12,037	41,856	17,871	123,277	79,804	467,163
Avera	ges													
1974-		194	61	898	25,509	158,326	23,591	158,067	30,286	112,026	19,664	138,786	99,111	568,103
1984-		350	105	1,548	46,874	292,611	44,786	299,885	52,420	195,272	34,683	245,789	178,869	1,035,106

Table 44. South Peninsula post June, July 5-December 31, salmon harvest by species, set gillnet gear, 1970-93.

Year F				inook		keye	Cohe	2	Pink		Chum	<u> </u>	Tota	1
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	24	168	5	120	12,934	87,958	672	5,178	16,080	64,320	20,352	122,112	50,043	279,688
1971	24	202	33	536	31,004	186,024	204	1,393	6,816	23,170	15,060	97,958	53,117	309,081
1972	22	119	12	116	8,598	53,049	139	1,069	4,206	15,944	11,002	80,212	23,957	150,390
1973	25	172	3	70	20,483	159,852	239	1,482	3,263	13,772	7,458	58,280	31,446	233,456
1974	35	199	18	213	31,726	238,117	152	1,117	9,289	40,003	5,139	39,637	46,324	319,087
1975	7	14	0	0	1,807	12,500	29	152	960	3,927	592	3,666	3,388	20,245
1976	14	34	2	30	5,511	39,791	160	1,120	5,226	23,449	1,312	10,156	12,211	74,546
1977	23	198	17	592	28,618	238,385	1,074	7,638	16,069	66,016	12,704	99,027	58,482	411,658
1978	26	247	16	467	12,567	93,267	2,929	25,365	29,214	106,052	19,704	150,364	64,430	375,515
1979	38	477	56	1,254	81,988	587,474	10,508	79,340	85,552	334,249	29,307	211,887	207,411	1,214,204
1980	42	707	68	1,184	103,109	693,031	23,725	160,514	99,055	351,478	84,624	569,844	310,581	1,776,051
1981	48	862	131	2,034	132,383	933,489	6,236	44,412	112,457	453,484	90,545	640,500	341,752	2,073,919
1982	51	1,116	165	2,820	67,683	486,581	16,134	125,331	112,755	431,308	91,387	698,172	288,124	1,744,212
1983	57	1,225	203	2,666	244,762	1,732,234	13,677	112,970	77,971	321,602	67,599	510,674	404,212	2,680,146
1984	62	1.440	294	5,223	203,494	1,412,794	25,715	201,262	265,032	1,086,573	91,169	678,916	585,704	3,384,768
1985	61	1,139	75	1,615	97,388	601,806	23,082	178,857	205,797	913,008	65,414	452,666	391,756	2,147,952
1986	59	1,381	167	3,219	245,013	1,746,071	13,446	94,203	108,882	430,742	71,400	524,970	438,908	2,799,205
1987	68	1,352	171	3,388		1,334,368	24,532	184,876	53,235	215,274	75,203	546,376	338,193	2,284,282
1988	69	1,944	283	5,606		1,752,267	40,110	316,948	291,671	1,168,152	84,743	651,042	665,262	3,894,015
1989	76	1,951	346	5,890	352.585	2,400,954	47,463	339,406	362,134	1,469,651	75,594	533,590	838,122	4,749,491
1990	80	1,671	437	6,433		2,576,535	38,496	293,159	57,117	199,420	69,200	478,132	546,978	3,553,679
1991	73	1,947	660	9,163	316,629	2,051,619	62,891	441,794	336,150	1,188,986	137,394	933,896	853,724	4,625,458
1992	76	2,144	269	4,289		2,504,302	62,212	448,476	409,440	1,532,857	73,875	524,661	928,347	5,014,585
1993	79	1,812	520	6,155	319,346	2,074,509	39,089	272,289	337,258	1,206,492	47,490	312,291	743,703	3,871,736
Averages	3												· · ·	
1974-93	52	1,093	195	3,112	172.120	1,175,505	22,583	166,461	148,763	577,136	59,720	428,523	403,381	2,350,738
1983-92	70	1,678	322	5,098		1,845,523	37,704	277,127	242,672	941,116	79,148	563,654	633,070	3,632,517

Table 45. Shumagin Islands Section July salmon test fish catch results, by set, date, and location, 1993.

										It	nmature	Salmon		
			Numl	per of Ad	ult Salm	on		<u></u>	N	umber			Per	cent
Date	Set	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Chum	Total	Sockeye	Chum
July 12	Popof Head							18	238	0	6	278	85.6	2.2
	Middle Set							17	149	0	5	176	84.7	2.8
	Red Bluff	<b>5</b> 0	400					10	33	0	3	49	67.4	6.1
	Total	50	492	728	516	172	1,958	45	420	0	14	503	83.5	2.8
	Average/Set	17	164	243	172	57	653	15	140	0	5	168	83.3	3.0
July 13	Popof Head							3	206	0	2	211	97.6	1.0
	Middle Set							0	88	0	1	89	98.8	1.1
	Red Bluff							0	330	0	36	366	90.2	9.8
	Total	29	459	164	352	226	1,230	3	624	0	39	666	93.7	5.9
	Average/Set	10	153	55	117	75	410	1	208	0	13	222	93.7	5.9
July 15	Popof Head							32	131	0	5	168	78.0	3.0
	Middle Set							3	23	0	2	28	82.1	7.1
	Red Bluff							15	6	0	0	21	28.6	0.0
	Total	29	213	454	421	103	1,220	50	160	0	7	217	73.7	3.2
	Average/Set	10	71	151	140	34	407	17	53	0	2	72	73.6	2.8
July 16	Popof Head							27	114	0	15	156	73.1	9.6
-	Popof Head							31	8	ō	2	41	19.5	4.9
	Middle Set							6	12	0	2	20	60.0	10.0
	Middle Set							11	24	0	1	36	66.7	2.8
	Red Bluff							13	38	0	1	52	73.1	1.9
	Total	22	155	808	315	49	1,349	88	196	0	21	305	64.3	6.9
	Average/Set	4	31	162	63	10	270	18	39	0	4	61	63.9	6.6
July 17	Popof Head							46	140	0	16	202	86.0	5.0
	Popof Head							38	111	Ō	9	158	70.3	5.7
	Popof Head							23	83	0	6	112	74.1	5.4
	Middle Set	•						7	58	0	3	68	85.3	4.4
	Red Bluff							8	33	0	0	41	80.5	0.0
	Total	81	308	2,005	856	164	3,414	122	425	0	34	581	73.2	5.9
	Average/Set	16	62	401	171	33	683	24	85	0	7	116	73.3	6.0
July 18	Popof Head							32	134	0	9	175	76.6	5.1
•	Popof Head							18	93	0	. 8	119	78.2	6.7
	Popof Head							13	61	Ö	4	78	78.2	5.1
	Red Bluff							5	13	o o	i	19	68.4	5.3
	Middle Set							17	62	Ö	2	81	76.5	2.5
	Total	48	177	733	484	113	1,555	85	363	ő	24	472	76.9	5.1
	Average/Set	10	35	147	97	23	311	17	73	ō	5	94	77.7	5.3

-Continued-

These numbers may differ from the number sold, some were given away for subsistence purposes.

- July 12: About 40% of adult salmon caught at Popof, 30% at Middle Set, and 30% at Red Bluff. A few (24) small pink salmon were caught and counted as immature salmon.
- July 13: About 60% of adult salmon caught at Popof, 10% at Middle Set, and 30% at Dark Cliff.
- July 16: The tide changed direction after the first set at Popof Head. The estimated adult catch was 500 fish during the first set, 350 during the second, 250 in third set, 150 in fourth set, and 80 in the last set.
- July 18: Approximately 400 adult salmon were caught in the first set, 450 in the second, 100 in the third, 200 in the fourth, and 450 in the last set. A seal was present in the first set and may have scared some fish out of the set.

Table 46. South Peninsula Post June fisheries<sup>a</sup>, coho salmon catch by gear, 1970-93.

	Purse :	Seine	Drift G	illnet	Set Gi	llnet	
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	31,774	97.8	55	0.2	672	2.1	32,501
1971	16344	96.7	351	2.1	204	1.2	16,899
1972	7,783	97.6	54	0.7	139	1.7	7,976
1973	6,137	95.9	21	0.3	239	3.7	6,397
1974	8,066	86.7	1,089	11.7	152	1.6	9,307
1975	37	56.1	0	0.0	29	43.9	66
1976	53	24.9	0	0.0	160	75.1	213
1977	1,034	49.1	0	0.0	1,074	50.9	2,108
1978	57,842	95.2	0	0.0	2,929	4.8	60,771
1979	345,889	97.1	3	0.0	10,508	2.9	356,400
1980	249,569	91.3	0	0.0	23,725	8.7	273,294
1981	155,651	96.1	10	0.0	6,236	3.9	161,897
1982	219,027	86.1	19,202	7.5	16,134	6.3	254,363
1983	109,822	86.4	3,658	2.9	13,677	10.8	127,157
1984	247,342	79.6	37,805	12.2	25,715	8.3	310,862
1985	128,931	75.8	18,033	10.6	23,082	13.6	170,046
1986	203,505	86.3	18,901	8.0	13,446	5.7	235,852
1987	169,763	75.5	30,445	13.5	24,532	10.9	224,740
1988	389,723	77.1	75,445	14.9	40,110	7.9	505,278
1989	305,558	69.2	88,376	20.0	47,463	10.8	441,397
1990	224,354	73.4	42,659	14.0	38,496	12.6	305,509
1991	199,104	63.6	51,215	16.4	62,891	20.1	313,210
1992	294,100	70.9	58,621	14.1	62,212	15.0	414,933
1993	148,565	69.4	26,364	12.3	39,089	18.3	214,018
1970-	93 Average						
	146,666		19,679	10.6	18,871	10.2	185,216
1984-	93 Average						
	231,095	73.7	44,786	14.3	37,704	12.0	313,585

<sup>&</sup>lt;sup>a</sup> Does not include test fish catches.

Table 47. South Peninsula Post June fisheries<sup>a</sup>, sockeye salmon catch by gear, 1970-93.

	Purse	Seine	Drift G	<u>illnet</u>	Set Gi	llnet	
Year	Number	Percent	Number	Percent	Number	Percent .	Total
1970	18,038	52.3	3,548	10.3	12,934	37.5	34,520
1971	52073	39.8	47,694	36.5	31,004	23.7	130,771
1972	18,196	51.4	8,598	24.3	8,598	24.3	35,392
1973	10,216	31.6	1,632	5.0	20,483	63.4	32,331
1974	39,900	50.7	7,135	9.1	31,726	40.3	78,761
1975	1,642	47.6	0	0.0	1,807	52.4	3,449
1976	8,182	59.8	0	0.0	5,511	40.2	13,693
1977	32,051	52.8	0	0.0	28,618	47.2	60,669
1978	57,448	82.1	0	0.0	12,567	17.9	70,015
1979	177,083	68.3	31	0.0	81,988	31.6	259,102
1980	166,564	61.7	398	0.1	103,109	38.2	270,071
1981	170,171	56.0	1,388	0.5	132,383	43.6	303,942
1982	90,283	52.7	13,472	7.9	67,683	39.5	171,438
1983	257,638	49.4	19,005	3.6	244,762	46.9	521,405
1984	240,959	51.1	26,698	5.7	203,494	43.2	471,151
1985	178,953	60.7	18,441	6.3	97,388	33.0	294,782
1986	412,251	60.0	30,261	4.4	245,013	35.6	687,525
1987	238,678	51.5	39,360	8.5	185,052	40.0	463,090
1988	423,852	59.1	44,657	6.2	248,455	34.7	716,964
1989	470,465		86,343	9.5	352,585	38.8	909,393
1990	524,630	50.5	132,907	12.8	381,728	36.7	1,039,265
1991	232,338	40.7	21,721	3.8	316,629	55.5	570,688
1992	443,201	50.9	44,935	5.2	382,551	43.9	870,687
1993	288,648	45.7	23,421	3.7	319,346	50.6	631,415
1970-	93 Averag						
±570-	189,728		23,819	6.6	146,476	40.7	360,022
1984-	93 Averag						
	345,398	51.9	46,874	7.0	273,224	41.1	665,496

<sup>&</sup>lt;sup>a</sup> Does not include test fish catches.

Table 48. Southeastern District Mainland fishery, salmon harvest, all gears combined, season total by day, 1993.

Cat	ch	•				Number	of Salmon		
lonth	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Tota
une	12	31	36	64	4,435	0	0	30	4,52
	13	22	22	21	3,079	0	1	2	3,10
	15	38	46	53	8,560	0	1	35	8,64
	16	46	64	105	15,945	0	2	133	16,18
	17	16	16	27	2,277	0	0	20	2,32
	26	29	37	36	21,461	2	9	244	21,75
	27	27	27	10	13,691	1	12	117	13,83
uly	3	26	27	2	3,821	2	2	5	3,83
-	4	28	<b>3</b> 5	2	4,176	0	2	9	4,18
	5	25	37	1	5,762	1	10	10	5,78
	6	22	32	2	6,896	0	0	0	6,89
	7	29	31	4	5,426	75	7	59	5,57
	8	20	27	3	5,800	2	23	52	5,88
	9	48	70	159	29,123	211	324	501	30,31
	10	20	33	2	5,498	0	0	1	5,50
	11	13	17	0	2,665	0	3	2	2,67
	12	15	17	0	2,748	0	2	2	2,75
	14	87	118	263	41,942	3,304	13,345	4,550	63,40
	15	16	18	4	2,215	0	59	13	2,29
	16	13	13	0	1,885	1	35	6	1,92
	20	*	*	*	*	*	*	*	
	21	*	*	*	*	*	*	*	
	22	10	12	2	1,852	9	1,014	57	2,93
	23	11	12	1	1,763	32	956	48	2,80
	24	87	93	332	18,997	567	62,121	3,370	85,38
	26	41	50	30	14,907	1,961	132,005	2,531	151,43
	27	47	62	24	17,219	3,043	167,643	4,519	192,44
	28	49	70	76	11,953	3,312	116,011	4,617	135,96
g	1	54	64	53	10,630	2,256	257,322	2,770	273,03
	2	56	69	73	11,212	3,222	204,968	4,178	223,65
	3	54	77	79	10,133	2,686	163,609	5,461	181,96
	6	40	50	8	4,875	631	163,239	2,827	171,58
	7	59	80	76	8,715	2,193	318,570	8,183	337,73
	8	52	67	32	5,698	3,132	271,005	3,222	283,08
	11	49	55	133	3,560	1,774	183,164	3,412	192,04
	12	47	57	54	3,481	2,042	196,006	3,529	205,11
	13	14	16	1	750	209	60,285	653	61,89
	16	13	16	0	1,089	571	84,154	3,318	89,13
	17	16	17	3	1,324	547	98,931	2,524	103,32
	18	. 8	8	0	1,504	432	43,310	1,078	46,32
	19	11	13	0	885	168	70,426	778	72,25
	20	7 *	7 *	1 *	294	194 *	40,233	509 *	41,23
	21 22	*	*	*		*		-	
	23	*	*	*	•	*			
	24	*		*	-	*	Ĵ	· •	
	25	*	*	*				·	
	26	*	*	*					
pt	1	7	8	1	775	136	99	221	1,23
P -	2	19	25	4	3,568	644	416	721	5,35
	3	22	27	5	3,227	832	0	495	4,55
	6	4	4	0	294	13	ő	74	38
	7	11	15	ő	1,199	657	ő	228	2,08
	8	7	8	ě	220	593	ő	247	1,06
	9	<u>.</u>	*	*	*	*	*	*	1,00
	13	8	8	1	184	238	0	28	4.5
	14	9	10	7	345	298	ŏ	50	70
	15	11	11	3	479	400	ŏ	21	90
	16	*	*	*	*	*	*	*	,
	17	4	4	0	129	132	0	0	26
	24	*	*	*	*	*	*	*	
	29	*	*	*	*	*	*	*	
	30	*	*	*	*	*		*	

-Continued-

Table 48. (page 2 of 2)

Cat	ch	_	_			Numbe	r of Salmon		
Month :	Date	Permits :	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
Oct	1 6	*	*	*	*	*	*	*	*
Total	Throu	igh July 2	5 845	1,093	210,927	4,207	78,278	9,266	303,771
Total		127	1,764	1,764	331,015	37,034	2,661,360	65,995	3,097,168

<sup>\*</sup> Confidentiality requirements prohibit reporting harvest by day.

Table 49. Southeastern District Mainland fishery, salmon harvest by purse seine gear, season total by day, 1993.

Ca	tch		_			Numbe	r of Salmon		
Month	Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
July	14	38	38	222	15,844	3,157	10,846	3,586	33,655
-	24	44	44	314	8,427	386	52,675	2,264	64,066
	26	10	12	13	2,863	1,741	125,759	843	131,219
	27	15	17	15	3,506	2,555	155,850	2,297	164,223
	28	17	1.7	60	2,052	2,749	103,107	2,083	110,051
Aug	1	22	23	40	6,074	1,829	247,991	1,735	257,669
-	2	21	23	62	3,835	2,425	189,030	2,160	197,512
	3	20	20	59	3,212	2,065	143,426	2,705	151,467
	6	14	15	5	842	259	151,747	1,392	154,245
	7	27	32	64	3,666	1,429	301,496	5,698	312,353
	8	21	22	24	2,131	2,045	253,134	1,566	258,900
	11	22	23	129	1,554	1,221	171,387	2,242	176,357
	12	24	24	44	969	1,276	182,623	1,867	186,779
	13	5	5	0	218	104	52,563	475	53,360
	16	11	11	0	903	543	82,217	3,161	86,824
	17	14	14	3	1,107	484	97,523	2,369	101,486
	18	6	6	0	1,281	377	42,809	969	45,436
	19	8	9	0	650	132	69,499	553	70,834
	20	6	6	1	283	180	40,169	500	41,133
	21	*	*	*	*	*	*	*	*
	22	*	*	*	*	*	*	*	*
Total		62	363	1,055	59,265	25,021	2,484,375	38,703	2,608,419

<sup>\*</sup> Confidentiality requirements prohibit reporting harvest by day.

Table 50. Southeastern District Mainland fishery, salmon harvest by set gillnet gear, season total by day, 1993.

Cat	ch		_			Number	of Salmon		
Month 1	Date	Permits La	andings	Chinook	Sockeye	Coho	Pink	Chum	Total
June	12	31	36	64	4,435	0	0	30	4,529
	13	22	22	21	3,079	0	1	2	3,103
	15	38	46	53	8,560	0	1	35	8,649
	16	46	64	105	15,945	0	2 0	133 20	16,185 2,324
	17 26	16 29	16 37	27 36	2,277 21,461	2	9	244	21,752
	27	27	27	10	13,691	1	12	117	13,831
July	3	26	27	2	3,821	2	2	5	3,832
July	4	28	35	2	4,176	ō	2	9	4,189
	5	25	37	1	5,762	1	10	10	5,784
	6	22	32	2	6,896	0	0	0	6,898
	7	29	31	4	5,426	75	7	59	5,571
	8	20	27	3	5,800	2	23	52	5,880
	9	48	70	159	29,123	211	324	501	30,318
	10	20	33	2	5,498	0	0	1	5,501
	11	13	17	0	2,665	0	3	2	2,670
	12	15	17	0	2,748	0	2	2	2,752
	14	49	80	41	26,098	147	2,499	964	29,749
	15	16 13	18 13	4 0	2,215	0 1	59 35	13 6	2,291 1,927
	16 20	* T2	*	*	1,885	*	*	*	1,327
	21	*	*	*	*	*	*	*	*
	22	10	12	2	1,852	9	1,014	57	2,934
	23	11	12	ī	1,763	32	956	48	2,800
	24	43	49	18	10,570	181	9,446	1,106	21,321
	26	31	38	17	12,044	220	6,246	1,688	20,215
	27	32	45	9	13,713	488	11,793	2,222	28,225
	28	32	53	16	9,901	563	12,904	2,534	25,918
Aug	1	31	41	13	4,556	427	9,331	1,035	15,362
	2	35	46	11	7,377	797	15,938	2,018	26,141
	3	34	57 25	20	6,921	621	20,183	2,756	30,501
	6 7	26 32	35 48	3 12	4,033	372 764	11,492	1,435 2,485	17,335 25,384
	8	31	45	8	5,049 3,567	1,087	17,074 17,871	1,656	24,189
	11	27	32	4	2,182	553	11,777	1,170	15,686
	12	23	33	1.0	2,512	766	13,383	1,662	18,333
	13	9	11	1	532	105	7,722	178	8,538
	16	*	*	*	*	*	*	*	*
	17	*	*	*	*	*	*	*	*
	18	*	*	*	*	*	*	*	*
	19	3	4	0	235	36	927	225	7,083
	20	*	*	*	*	*	*	*	*
	21	*	*	*	*	*	*	*	*
	22 23	*		*		<b>.</b>	*	÷	*
	24	*	*	*	*	*	*	*	*
	25	*	*	*	*	*	*	*	*
	26	*	*	*	*	*	*	*	*
Sept	1	7	8	1	775	136	99	221	1,232
	2	19	25	4	3,568	644	416	721	5,353
	3 6	22	27	5	3,227	832	0	495	4,559
	6	4	4	0	294	13	0	74	381
	7	11	15	0	1,199	657	0	228	2,084
	8	7	8	6 *	220	593	0	247	1,066
	9	*	*		*	*	*	*	*
	13	8	8	1	184	238	0	28	451
	14	9 11	10	7	345 479	298	0	50	700
	15 16	3	11 3	3 0	83	400 30	0	21 7	903 120
	17	3 4	4	0	129	132	0	0	261
	24	*	*	*	*	*	*	*	201 *
	29	*	*	*	*	*	*	*	*
	30	*	*	*	_	*	*		*

-Continued-

Table 50. (page 2 of 2)

Cat	ch		_			Number	of Salmon		
Month	Date	Permits I	andings	Chinook	Sockeye	Coho	Pink	Chum	Total
Oct	1 6	*	*	*	*	*	*	*	*
Total		65	1,401	709	271,750	12,013	176,985	27,292	488,749

<sup>\*</sup> Confidentiality requirements prohibit reporting harvest by day.

Table 51. Southeastern District post June, July 5-December 31, salmon harvest by species, all gear combined, 1970-93.

			Chi	nook	Sockeve		Coh	0	Pi	.nk	Chi	um	Tot	al
Year	Permits	Landings		Pounds		nds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	62	714	739	12,105	27,786 188,	964 3	1,357	241,482	671,332	2,685,328	162,313	973,878	893,527	4,101,757
1971	62	1,034	1,185	19,390	70,003 420,	018 1	6,369	111,332	704,255	2,394,460	433,876	2,819,592	1,225,688	5,764,792
1972	58	506	644	10,241	26,548 175,	131	7,893	55,343	45,061	179,495	118,254	724,277	198,400	1,144,487
1973	38	334	124	1,277	30,401 231,	462	6,263	40,820	27,782	106,540	41,463	325,454	106,033	705,553
1974	49	353	456	3,937	65,461 442,	002	8,212	55,760	81,811	327,464	43,821	<b>3</b> 33,889	199,761	1,163,052
1975	13	25	0	0	3,156 21,	526	63	315	3,020	11,946	770	4,841	7,009	38,628
1976	57	303	2	30	7,900 56,	133	201	1,382	578,581	2,506,205	32,657	242,964	619,341	2,806,714
1977	54	299	28	862	39,099 321,	922	2,075	14,904	170,648	677,431	21,664	164,833	233,514	1,179,952
1978	76	947	209	4,262	63,391 409,	926 4	7,206	318,518	1,906,403	6,501,016	232,274	1,736,910	2,249,483	8,970,632
1979	104	1,496	1,014	14,685	243,649 1,651,	590 33	8,221	2,251,433	3,237,187	11,869,126	171,934	1,236,578		17,023,412
1980	103	1,684	1,460	17,780	229,739 1,429,	474 25	3,971	1,429,119	1,949,427	6,186,370	462,731	3,016,475	2,897,328	12,079,218
1981	107	1,845	4,306	50,744	263,430 1,782,	109 14	0,363	929,897	2,275,113	8,587,768	720,133	5,143,913	3,403,345	16,494,431
1982	109	2,113	2,350	33,251	131,985 882,	514 22	3,202	1,571,042	2,543,146	8,496,757	673,943	5,215,130	3,574,626	16,198,694
1983	114	2,081	7,923	75,196	432,808 3,033,	860 11	0,800	794,718	1,079,426	4,116,694	467,182	3,313,989	2,098,139	11,334,457
1984	120	2,123	3,860	56,211	318,228 2,150,	050 24	0,818	1,718,730	3,084,662	11,747,535	513,050	3,699,158	4,160,618	19,371,684
1985	119	1,806	588	11,578	187,449 1,085,	074 12	8,738	886,536	2,645,117	11,006,255	370,855	2,441,748		15,431,191
1986	115	2,227	3,427	47,855	523,310 3,658,	936 20	6,461	1,324,705	1,988,146	7,091,698	722,800	5,170,213	3,444,144	17,293,407
1987	134	2,009	3,676	46,322	355,837 2,574,	642 1.8	2,036	1,290,250	921,294	3,289,046	551,932	4,006,178	2,014,775	11,206,438
1988	127	3,079	6,304	91,507	575,291 3,882,	125 39	1,739	2,804,698	4,577,143	16,492,624	674,140	5,031,957		28,302,911
1989	146	2,785	3,693	58,836	695,215 4,459,	022 32	5,527	2,172,819	5,032,082	19,009,543	371,393	2,541,011		28,241,231
1990	150	2,357	5,761	75,922	701,679 4,581,	730 23	9,401	1,658,125	1,356,637	4,469,046	502,600	3,119,351		13,904,174
1991	143	2,529	2,539	34,090	427,234 2,701,	025 19	6,549	1,183,072	4,270,070	13,494,957	410,317	2,639,080		20,052,224
1992	136	2,628	3,248	42,049	469,388 2,985,	927 28	8,768	1,834,415	3,293,819	11,458,890	339,082	2,233,955	4,394,305	18,555,236
1993	129	2,467	4,022	44,760	450,782 2,882,	453 16	6,344	1,009,246	5,990,805	19,938,239	187,329	1,145,549	6,799,282	25,020,247
Averages														
1970-93	97	1,573	2,398	31,370	264,157 1,750,	317 14	8,024	987,444	2 018 040	7,193,518	342 771	2,386,705	2 775 391	12,349,355
1984-93	132	2,401	3,712	50,913	470,441 3,096,			1,588,260		11,799,783		3,202,820		19,737,874
1704-73	132	2,401	5,112	50,513	4,0,441 3,050,	0,0 23	0,000	1,300,200	3,313,310	11,,,,,,,,	104,550	5,202,020	.,.,,,,,,,	15,757,071

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Table 52. Southeastern District post June, July 5-December 31, salmon harvest by species, purse seine gear, 1970-93.

			Chin	ook	Sock	eye	Col	10	Pi	nk	Ch	num		Cotal
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	60	552	734	11,985	14,981	101,884	30,692	236,358	655,542	2,622,168	142,219	853,314	844,168	3,825,709
1971	52	834	1,152	18,854	39,164	234,984	16,167	109,953	697,442	2,371,300	418,974	2,722,661	1,172,899	5,457,752
1972	48	398	634	10,144	17,982	122,279	7,760	54,320	41,472	165,888	110,110	664,900	177,958	1,017,531
1973	26	174	122	1,237	9,995	72,212	6,047	39,501	24,653	93,322	35,461	279,116	76,278	485,388
1974	34	175	439	3,744	35,018	212,671	8,060	54,643	73,791	292,755	39,701	302,304	157,009	866,117
1975	6	11	0	0	1,349	9,026	34	163	2,060	8,019	178	1,175	3,621	18,383
1976	46	270	0	0	2,452	16,782	41	262	573,476	2,483,336	31,388	233,168	607,357	2,733,548
1977	34	136	12	300	13,053	105,267	1,006	7,296	164,621	651,874	14,898	111,864	193,590	876,601
1978	53	709	196	3,875	50,940	317,584	44,277	293,153	1,883,690	6,416,194	213,020	1,590,078	2,192,123	8,620,884
1979	73	1,051	958	13,431	163,924	1,078,673	327,855 2	2,173,183	3,165,910	11,586,248	148,448	1,068,284	3,807,095	15,919,819
1980	70	1,079	1,410	16,879	136,975	797,072	237,824	1,315,537	1,899,007	6,002,618	400,803	2,596,661	2,676,019	10,728,767
1981	70	1,105	4,182	48,822	137,337	888,051	135,502	895,411	2,174,093	8,179,663	655,413	4,696,703	3,106,527	14,708,650
1982	68	1,157	2,202	30,697	69,453	428,073	209,549 1	1,463,464	2,448,251	8,129,337	597,673	4,634,778	3,327,128	14,686,349
1983	69	998	7,769	73,203	206,002	1,415,693	97,636	685,551	1,042,568	3,958,622	412,303	2,901,639		9,034,708
1984	69	894	3,619	51,968	138,955	881,994	225,172	1,588,017	2,884,707	10,902,341		3,183,752		16,608,072
1985	69	916	539	10,471	110,864	605,771	118,610	807,530	2,457,622	10,167,862	328,562	2,147,062	3,016,197	13,738,696
1986	67	1,061	3,299	45,434	303,413	2,071,919	200,360 1	L,280,505	1,893,638	6,711,676	668,909	4,774,529	3,069,619	14,884,063
1987	78	836	3,540	43,723	192,997	1,383,526	164,486 1	L,154,983	874,323	3,096,014	490,339	3,556,761	1,725,685	9,235,007
1988	72	1,394	6,096	87,205	359,728	2,345,588	370,656 2	2,632,253	4,312,986	15,432,933	606,697	4,514,941	5,656,163	25,012,920
1989	84	1,079	3,392	54,378	382,429	2,316,239	292,333 1	L,941,803	4,696,630	17,646,925	306,319	2,085,961	5,681,103	24,045,306
1990	82	951	5,359	70,172	379,620	2,412,162	215,797 1	L,484,967	1,310,643	4,312,922	442,490	2,713,108	2,353,909	10,993,331
1991	78	824	1,650	23,063	147,797	877,901	162,791	959,727	3,967,287	12,434,072	288,033	1,821,661	4,567,558	16,116,424
1992	74	757	2,904	36,968	161,687	947,267	245,368 1	1,524,322	2,925,519	10,076,359	276,400	1,795,358	3,611,878	14,380,274
1993	64	849	3,318	37,111	180,279	1,098,009	134,909	798,770	5,671,206	18,792,678	147,201	885,279	6,136,913	21,611,847
Average	s													
1970-93		759	2,230	28,903	135,683	864,193	135,539	895,903	1,910,047	6,772,297	300.844	2,088,961	2.484.344	10,650,256
1984-93		956	3,372	46,049		1,494,038	213,048 1			10,957,378		2,747,841		16,662,594
1704 77	, 4	750	5,5,2	10,045	233,777	-,, 050	245,010	.,, 200	5,000,100	10,55.,510	222,200	-, , 0 11	5,551,011	,2,55.

Table 53. Southeastern District post June, July 5-December 31, salmon harvest by species, set gillnet gear, 1970-93.

			Chir	ook	Soci	keye	Coh	.0	Pi	.nk	Ch	um	To	tal
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	22	162	5	120	12,805	87,080	665	5,124	15,790	63,160	20,094	120,564	49.359	276,048
1971	22	200	33	536	30,839	185,034	202	1,379	6,813	23,160	14,902	96,931	52,789	307.040
1972	16	108	10	97	8,566	52,852	133	1,023	3,589	13,607	8,144	59,377	20,442	126,956
1973	21	160	2	40	20,406	159,250	216	1,319	3,129	13,218	6,002	46,338	29,755	220,165
1974	30	178	17	193	30,443	229,331	152	1,117	8,020	34,709	4,120	31,585	42,752	296,935
1975	7	14	0	0	1,807	12,500	29	152	960	3,927	592	3.666	3,388	20,245
1976	13	33	2	30	5,448	39,351	160	1,120	5,105	22,869	1,269	9,796	11,984	73,166
1977	20	163	16	562	26,046	216,655	1,069	7,608	6,027	25,557	6,766	52,969	39,924	303,351
1978	24	238	13	387	12,451	92,342	2,929	25,365	22,713	84,822	19,254	146,832	57,360	349,748
1979	35	445	56	1,254	79,725	572,917	10,366	78,250	71,277	282,878	23,486	168,294	184,910	1,103,593
1980	35	605	50	901	92,764	632,402	16,147	113,582	50,420	183,752	61,928	419,814	221,309	1,350,451
1981	37	740	124	1,922	126,093	894,058	4,861	34,486	101,020	408,105	64,720	447,210	296,818	1,785,781
1982	41	956	148	2,554	62,532	454,441	13,653	107,578	94,895	367,420	76,270	580,352	247,498	1,512,345
1983	45	1,083	154	1,993	226,806	1,618,167	13,164	109,167	36,858	158,072	54,879	412,350	331,861	2,299,749
1984	51	1,229	241	4,243	179,273	1,268,056	15,646	130,713	199,955	845,194	68,322	515,406	463,437	2,763,612
1985	50	890	49	1,107	76,585	479,303	10,128	79,006	187,495	838,393	42,293	294,686	316,550	1,692,495
1986	48	1,166	128	2,421	219,897	1,587,017	6,101	44,200	94,508	380,022	53,891	395,684	374,525	2,409,344
1987	56	1,173	136	2,599	162,840	1,191,116	17,550	135,267	46,971	193,032	61,593	449,417	289,090	1,971,431
1988	55	1,685	208	4,302	215,563	1,536,537	21,083	172,445	264,157	1,059,691	67,443	517,016	568,454	3,289,991
1989	61	1,700	245	3,872	311,087	2,134,424	30,748	215,469	331,924	1,350,938	64,335	450,569	738,339	4,155,272
1990	67	1,399	379	5,547	321,093	2,164,444	21,896	163,414	41,519	142,546	57,651	394,013	442,538	2,869,964
1991	64	1,692	579	7,902	276,036	1,809,189	29,927	203,201	292,731	1,031,254	115,610	783,493	714,883	3,835,039
1992	61	1,858	251	4,014	305,481	2,026,953	40,116	289,368	358,829	1,355,869	58,243	412,526	762,920	4,088,730
1993	64	1,612	460	5,398	268,742	1,775,089	26,543	183,268	316,655	1,136,763	39,301	256,082	651,701	3,356,600
Averages														
1970-93	39	812	138	2,166	128,055	884,105	11,812	87,651	106,723	417,457	41,296	294,374	288,024	1,685,752
1984-93	58	1,440	268	4,141		1,597,213	21,974	161,635	213,474	833,370	62,868	446,889	532,244	3,043,248
1904-93	20	1,440	200	4,141	233,000 .	1,551,213	21,314	101,035	213,4/4	033,370	02,000	440,883	332,244	3,043,240

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Table 54. McGinty Point to Moss Cape post June, July 5-December 31, salmon harvest by species, all gear combined, 1970-93.

			Chine	ook	Soc	keye		Coho	Pi	nk	Chum		T	otal
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	66	630	1	16	978	6,668	1,110	8,552	821,967	3,281,199	337,850 2,0	27,014	1,161,906	5,323,449
1971	63	606	12	193	1,124	6,744	89	612	608,108	2,067,740	231,958 1,5	07,999	841,291	3,583,288
1972	35	129	8	115	171	1,163	9	63	11,298	45,065	32,868 2	200,804	44,354	247,210
1973	29	121	1	30	105	711	107	750	7,229	28,771	26,367 2	216,646	33,809	246,908
1974	15	42	1	20	1,343	9,218	0	0	12,857	47,020	2,190	17,498	16,391	73,756
1975	32	48	0	0	53	239	3	14	34,517	134,550	28,969 1	185,130	63,542	319,933
1976	66	800	3	40	4,421	23,891	12	60	1,744,992	7,630,449	79,094 5	91,050	1,828,522	8,245,490
1977	88	992	7	249	9,024	69,780	32	214	1,256,922	4,997,040	98,327 8	302,226	1,364,312	5,869,509
1978	82	933	11	330	2,604	14,718	1,729	6,843	2,348,048	7,673,130	134,839 1,0	52,088	2,487,231	8,747,109
1979	93	819	6	205	4,376	27,375	4,426	35,472	2,238,593	8,035,783	175,441 1,2	296,563	2,422,842	9,395,398
1980	80	433	12	266	3,396	21,292	1,614	9,629	1,011,896	3,380,748	248,999 1,6	61,454	1,265,917	5,073,389
1981	101	724	16	333	11,973	60,843	1,852	13,083	2,082,898	7,563,964	333,489 2,4	182,568	2,430,228	10,120,791
1982	70	614	33	744	3,131	19,036	4,158	31,589	1,809,040	6,332,216	304,807 2,4	133,093	2,121,169	8,816,678
1983	92	618	203	2,123	9,538	64,490	3,608	25,541	1,354,304	5,168,025	158,923 1,1	98,971	1,526,576	6,459,150
1984	101	834	372	5,419	24,919	162,783	5,283	39,751	4,132,985	15,493,208	397,029 2,9	28,432	4,560,588	18,629,593
1985	76	503	75	1,912	25,519	154,555	5,906	42,607	1,252,884	5,097,733	336,104 2,4	126,165	1,620,488	7,722,972
1986	67	485	37	730	57,946	397,835	1,404	9,923	1,358,131	4,462,805	388,047 2,8	386,234	1,805,565	7,757,527
1987	89	444	119	1,861	47,866	338,964	2,578	17,124	237,614	774,265	290,350 2,1	158,492	578,527	3,290,706
1988	61	349	395	7,072	63,303	439,635	17,315	94,916	319,803	1,142,764	323,988 2,6	14,058	724,804	4,298,445
1989	79	290	118	2,472	81,058	528,126	5,315	35,330	590,519	2,259,847	52,827 3	375,819	729,837	3,201,594
1990	99	452	194	3,627	151,597	1,079,439	8,146	52,934	609,313	1,988,685	93,920 6	85,218	863,170	3,809,903
1991	105	695	353	4,984	95,171	585,757	34,516	203,574	3,906,212	12,338,118	252,875 1,7	728,924	4,289,127	14,861,357
1992	118	757	755	11,013	273,637	1,699,350	40,134	257,811	3,166,208	10,511,320	397,161 2,7	743,165	3,877,895	15,222,659
1993	92	491	292	3,789	108,341	660,163	13,089	79,335	2,159,042	7,318,037	229,599 1,5	570,587	2,510,363	9,631,911
Averages														
1974-93	80	566	150	2,359	48,961	317,874	7,556	47,788	1,581,339	5,617,485	216,349 1,5	91.887	1,854,355	7,577,394
1984-93	89	530	271	4,288	92,936	604,661	13,369	83,331	1,773,271	6,138,678	276,190 2,0		2,156,036	8,842,667

Table 55. McGinty Point to Moss Cape post June, July 5-December 31, salmon harvest by species, purse seine gear, 1970-93.

			Chir	ook	Socke	eye	Co	ho	Pi	nk	Cl	num	T	otal
Year	Permits L	andings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	63	628	1	16	976	6,654	1,103	8,498	821,693	3,280,103		2,026,462	1,161,531	5,321,733
1971	63	606	12	193	1,124	6,744	89	612	608,108	2,067,740		1,507,999	841,291	3,583,288
1972	34	121	6	96	161	1,102	9	63	10,698	42,792	30,081	180,486	40,955	224,539
1973	27	110	0	0	55	329	84	587	7,096	28,221	24,924	204,784	32,159	233,921
1974	10	21	0	0	60	432	0	0	11,588	41,726	1,171	9,446	12,819	51,604
1975	32	48	0	0	53	239	3	14	34,517	134,550	28,969	185,130	63,542	319,933
1976	65	799	3	40	4,358	23,451	12	60	1,744,871	7,629,869	79,051	590,690	1,828,295	8,244,110
1977	80	957	6	219	6,452	48,050	27	184	1,246,880	4,956,581	92,389	756,168	1,345,754	5,761,202
1978	79	924	8	250	2,488	13,793	1,729	6,843	2,341,547	7,651,900	134,389		2,480,161	8,721,342
1979	80	795	6	205	2,126	12,906	4,295	34,482	2,227,213	7,994,700	170,399		2,404,039	9,301,168
1980	71	396	10	191	2,494	14,914	490	2,579	979,019	3,271,525		1,569,042	1,216,535	4,858,251
1981	92	692	14	283	9,834	47,164	1,783	12,482	2,075,068	7,531,825		2,384,554	2,406,726	9,976,308
1982	65	590	32	729	2,844	16,858	4,146	31,496	1,804,822	6,317,412	301,486	2,408,435	2,113,330	8,774,930
1983	84	579	195	2,028	7,526	51,201	3,542	25,139	1,326,582	5,056,862		1,159,522	1,491,439	6,294,752
1984	97	814	361	5,235	22,676	148,466	5,265	39,600	4,124,259	15,462,318		2,842,084	4,537,405	
1985	71	483	72	1,784	23,809	142,990	5,898	42,543	1,244,188	5,062,485	328,730	2,378,661	1,602,697	7,628,463
1986	65	473	35	678	56,551	388,877	1,403	9,917	1,357,777	4,461,896		2,837,790	1,797,435	7,699,158
1987	77	396	110	1,628	38,852	278,571	2,241	14,780	232,080	754,879		2,112,773	557,233	3,162,631
1988	53	300	387	6,856	46,340	326,799	15,210	81,193	318,506	1,138,650		2,568,80 <b>7</b>	698,662	4,122,305
1989	68	217	99	2,025	59,889	384,336	4,541	29,944	572,155	2,187,820	50,390	357,592	687,074	2,961,717
1990	82	370	179	3,436	122,015	873,139	6,853	44,444	600,260	1,956,462	90,188	657,554		3,535,035
1991	94	600	330	4,644	74,518	458,773	27,050	159,240	3,874,087	12,223,243		1,655,858	4,218,462	
1992	106	699	752	10,956	253,888	1,568,471	38,559	247,366	3,150,762	10,458,958		2,720,991	3,838,052	
1993	79	437	282	3,655	98,925	599,203	12,386	74,943	2,146,264	7,277,175	227,186	1,553,781	2,485,043	9,508,757
Averages														
1974-93	73	530	144	2,242	41,785	269,932	6,772	42,862	1,570,622	5,578,542	210,887	1,552,815	1,830,210	7,446,393
1984-93	79	479	261	4,090	79,746	516,963	11,941	74,397	1,762,034	6,098,389	270,174	1,968,589	2,124,156	8,662,427

Table 56. McGinty Point to Moss Cape post June, July 5-December 31, salmon harvest by species, set gillnet gear<sup>a</sup>, 1970-93.

			Chino	ook	Soci	keye	Co	ho	Pir	nk	Ch	num	T	otal
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	2	2	0	0	2	14	7	54	274	1,096	92	552	375	1,716
1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	4	8	2	19	10	61	0	0	600	2,273	2,787	20,318	3,399	22,671
1973	3	1.1	1	30	50	382	23	163	133	550	1,443	11,862	1,650	12,987
1974	8	21	1	20	1,283	8,786	0	0	1,269	5,294	1,019	8,052	3,572	22,152
1975	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1976*	1	1	0	0	63	440	0	0	121	580	43	360	227	1,380
1977	9	35	1	30	2,572	21,730	5	30	10,042	40,459	5,938	46,058	18,558	108,307
1978	4	9	3	80	116	925	0	0	6,501	21,230	450	3,532	7,070	25,767
1979	8	24	0	0	2,250	14,469	131	990	11,380	41,083	5,042	37,688	18,803	94,230
1980	9	37	2	75	902	6,378	1,124	7,050	32,877	109,223	14,477	92,412	49,382	215,138
1981	6	32	2	50	2,139	13,679	69	601	7,830	32,139	13,462	98,014	23,502	144,483
1982	4	24	1	15	287	2,178	12	93	4,218	14,804	3,321	24,658	7,839	41,748
1983	8	39	8	95	2,012	13,289	66	402	27,722	111,163	5,329	39,449	35,137	164,398
1984	4	20	11	184	2,243	14,317	18	151	8,726	30,890	12,185	86,348	23,183	131,890
1985	5	20	3	128	1,710	11,565	8	64	8,696	35,248	7,374	47,504	17,791	94,509
1986*	2	12	2	52	1,395	8,958	1	6	354	909	6,378	48,444	8,130	58,369
1987	12	48	9	233	9,014	60,393	337	2,344	5,534	19,386	6,400	45,719	21,294	128,075
1988	8	49	8	216	16,963	112,836	2,105	13,723	1,297	4,114	5,769	45,251	26,142	176,140
1989	11	73	19	447	21,169	143,790	774	5,386	18,364	72,027	2,437	18,227	42,763	239,877
1990	17	82	15	191	29,582	206,300	1,293	8,490	9,053	32,223	3,732	27,664	43,675	274,868
1991	11	95	23	340	20,653	126,984	7,466	44,334	32,125	114,875	10,398	73,066	70,665	359,599
1992	12	58	3	57	19,749	130,879	1,575	10,445	15,446	52,362	3,070	22,174	39,843	215,917
1993	13	54	10	134	9,416	60,960	703	4,392	12,778	40,862	2,413	16,806	25,320	123,154
Averages	3													
1974-93	8	37	6	117	7,176	47,943	784	4,925	10,717	38,944	5,462	39,071	24,145	131,000
1984-93	10	51	10	198	13,189	87,698	1,428	8,934	11,237	40,290	6,016	43,120	31,881	180,240

<sup>&</sup>lt;sup>a</sup> Several drift gillnet deliveries in database, added all these to purse seine catches.

Table 57. Belkofski Bay to Kenmore Head post June, July 5-December 31, salmon harvest by species, all gear combined<sup>a</sup>, 1970-93.

		-	Chi	nook	So	ckeye	Co	oho	P	ink	Ch	um	To	tal
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	r Pounds	Number	Pounds	Number	Pounds
1970	28	97	0	0	1,049	7,136	17	131	128,047	512,188	35,060	210,360	164,173	729,815
1971	23	94	1	16	1,118	6,708	13	89	106,649	362,602	30,198	196,312	137,979	565,727
1972	11	17	0	0	7	48	0	0	3,125	12,500	2,296	13,776	5,428	26,324
1973	4	8	0	0	166	857	6	50	731	2,646	1,403	12,620	2,306	16,173
1974	4	4	0	0	0	0	0	0	1,411	5,634	224	1,944	1,635	7,578
1975	15	17	0	0	240	1,170	0	0	17,858	72,224	189	1,122	18,287	74,516
1976	9	12	0	0	1,372	7,623	0	0	18,454	82,619	6,908	57,955	26,734	148,197
1977	16	24	0	0	12,546	83,872	1	7	15,675	61,271	6,771	62,800	34,993	207,950
1978	42	273	0	0	3,998	23,629	11,834	48,340	1,198,699	4,308,330	54,027	429,470	1,268,558	4,809,769
1979	47	290	0	0	11,077	76,802	13,753	118,458	920,547	3,302,489	23,598	189,061	968,975	3,686,810
1980	80	632	17	243	36,439	204,267	17,652	112,378	3,245,136	10,933,430	105,083	748,760	3,404,327	11,999,078
1981	47	262	5	62	19,307	120,394	19,029	131,035	215,066	751,182	98,875	745,991	352,282	1,748,664
1982	53	381	1.4	243	19,233	115,121	1,457	11,225	612,564	2,169,532	167,191	1,297,172	800,459	3,593,293
1983	52	194	9	124	14,097	87,627	699	6,816	320,468	1,167,362	85,777	680,265	421,050	1,942,194
1984	74	517	2	40	60,794	358,274	730	5,335	3,116,179	11,606,694	231,619	1,740,163	3,409,324	13,710,506
1985	50	264	6	123	45,812	255,113	7,238	60,789	388,365	1,454,495	176,437	1,222,924	617,858	2,993,444
1986	52	286	7	225	42,922	281,838	2,498	19,370	332,177	1,114,563	243,182	1,931,007	620,786	3,347,003
1987	29	73	6	110	5,017	31,397	6,809	53,155	26,190	87,146	33,879	241,254	71,901	413,062
1988	51	495	19	324	7,328	48,025	11,581	99,915	1,721,963	6,064,733	250,009	1,985,218	1,990,900	8,198,215
1989	48	347	26	447	13,535	85,263	5,365	46,412	1,362,488	5,183,121	18,227	138,864	1,399,641	5,454,107
1990	50	210	30	433	22,779	150,735	13,156	110,844	321,850	995,083	33,549	246,647	391,364	1,503,742
1991	50	363	75	1,088	18,846	108,578	19,011	156,363	1,773,650	5,711,540	104,063	778,739	1,915,645	6,756,308
1992	56	526	59	1,115	70,369	427,368	14,794	109,542	2,428,144	8,165,138	104,649	768,280	2,618,015	9,471,443
1993	56	427	108	1,548	47,652	275,667	10,800	78,545	1,683,508	5,824,139	78,205	525,205	1,820,273	6,705,340
Averages														
1974-93	44	280	19	306	22,668	137,138	7,820	58,426	986,020	3,453,036	91,123	689,654	1,107,650	4,338,561
1984-93	52	351	34	545	33,505	202,226	9,198	74,027	1,315,451		127,382	957,854	1,485,571	

<sup>&</sup>lt;sup>a</sup> Added all drift gillnet and beach seine landings to purse seine catch.

Table 58. Belkofski Bay to Kenmore Head post June, July 5-December 31, salmon harvest by species, purse seine gear<sup>a</sup>, 1970-93.

		_	Chi	nook	So	ckeye	<u>C</u> c	oho	P	ink	Ch	ıum	To	otal
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	r Pounds	Number	Pounds	Number	Pounds
1970	28	97	0	0	1,049	7,136	17	131	128,047	512,188	35,060	210,360	164,173	729,815
1971	23	94	1	16	1,118	6,708	13	89	106,649	362,602	30,198	196,312	137,979	565,727
1972	11	17	0	0	7	48	0	0	3,125	12,500	2,296	13,776	5,428	26,324
1973	4	8	0	0	166	857	6	50	731	2,646	1,403	12,620	2,306	16,173
1974	4	4	0	0	0	0	0	0	1,411	5,634	224	1,944	1,635	7,578
1975	15	17	0	0	240	1,170	σ	0	17,858	72,224	189	1,122	18,287	74,516
1976	9	12	0	0	1,372	7,623	0	0	18,454	82,619	6,908	57,955	26,734	148,197
1977	16	24	0	0	12,546	83,872	1	7	15,675	61,271	6,771	62,800	34,993	207,950
1978	42	273	0	0	3,998	23,629	11,834	48,340	1,198,699	4,308,330	54,027	429,470	1,268,558	4,809,769
1979	46	282	0	0	11,064	76,714	13,742	118,358	917,652	3,292,201	22,819	183,156	965,277	3,670,429
1980	72	571	1	35	27,032	150,250	11,210	72,592	3,229,721	10,876,025	96,889	691,333	3,364,853	11,790,235
1981	39	179	0	0	15,298	95,512	17,753	121,895	211,505	738,067	86,655	651,885	331,211	1,607,359
1982	43	272	5	83	16,220	96,632	68	456	601,255	2,128,242	155,584	1,205,395	773,132	3,430,808
1983	43	148	0	0	6,254	38,023	645	6,383	307,380	1,116,205	79,693	630,861	393,972	1,791,472
1984	66	494	2	40	52,696	308,845	189	1,340	3,077,230	11,461,168	229,937	1,726,974	3,360,054	13,498,367
1985	43	228	4	89	40,265	223,503	3,152	27,546	383,454	1,434,584	167,626	1,162,932	594,501	2,848,654
1986	45	239	2	77	35,846	235,205	711	5,480	324,921	1,087,932	239,991	1,906,654	601,471	3,235,348
1987	21	39	0	0	1,509	9.885	2,899	23,686	25,894	85,970	30,101	213,994	60,403	333,535
1988	43	425	9	169	1,409	8.676	3,292	29,122	1,711,841	6,026,572	244,710	1,943,436	1,961,261	8,007,975
1989	37	285	12	208	5,724	37,739	137	950	1,353,531	5,148,000	13,049	100,467	1,372,453	5,287,364
1990	33	109	13	159	5,463	36,177	1,520	13,982	317,123	976,755	28,078	207,051	352,197	1,234,124
1991	39	267	59	858	6,564	39,258	4,519	30,687	1,764,619	5,677,462	99,087	744,328	1,874,848	6,492,593
1992	39	370	53	1,021	24,176	147,147	4,785	31,706	2,402,746	8,075,247	97,710	718,229	2,529,470	8,973,350
1993	40	307	66	1,047	9,307	54,340	1,270	7,956	1,677,193	5,800,765	73,817	495,554	1,761,653	6,359,662
Averages	3													
1974-93	37	227	11	189	13,849	83,710	3,886	27.024	977,908	3,422,764	86,693	656,777	1,082,348	4,190,464
1984-93	41	276	22	367	18,296	110,078	2,247	17,246	1,303,855	4,577,446	122,411	921,962	1,446,831	5,627,097

<sup>&</sup>lt;sup>a</sup> Added all drift gillnet and beach seine landings to purse seine catch.

Table 59. Belkofski Bay to Kenmore Head post June, July 5-December 31, salmon harvest by species, set gillnet gear<sup>a</sup>, 1970-93.

		-	Chir	nook	So	ckeye	C	oho	Pir	ık	Chu	m	Tot	al
Year	Permits La	andings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0 '	0	0	0	0	0	0
1979	1	8	0	0	13	88	11	100	2,895	10,288	779	5,905	3,698	16,381
1980	8	61	16	208	9,407	54,017	6,442	39,786	15,415	57,405	8,194	57,427	39,474	208,843
1981	8	83	5	62	4,009	24,882	1,276	9,140	3,561	13,115	12,220	94,106	21,071	141,305
1982	10	109	9	160	3,013	18,489	1,389	10,769	11,309	41,290	11,607	91,777	27,327	162,485
1983	9	46	9	124	7,843	49,604	54	433	13,088	51,157	6,084	49,404	27,078	150,722
1984	8	23	0	0	8,098	49,429	541	3,995	38,949	145,526	1,682	13,189	49,270	212,139
1985	7	36	2	34	5,547	31,610	4,086	33,243	4,911	19,911	8,811	59,992	23,357	144,790
1986	7	47	5	148	7,076	46,633	1,787	13,890	7,256	26,631	3,191	24,353	19,315	111,655
1987	8	34	6	110	3,508	21,512	3,910	29,469	296	1,176	3,778	27,260	11,498	79,527
1988	8	70	10	155	5,919	39,349	8,289	70,793	10,122	38,161	5,299	41,782	29,639	190,240
1989	11	62	14	239	7,811	47,524	5,228	45,462	8,957	35,121	5,178	38,397	27,188	166,743
1990	17	101	17	274	17,316	114,558	11,636	96,862	4,727	18,328	5,471	39,596	39,167	269,618
1991	11	96	16	230	12,282	69,320	14,492	125,676	9,031	34,078	4,976	34,411	40,797	263,715
1992	17	156	6	94	46,193	280,221	10,009	77,836	25,398	89,891	6,939	50,051	88,545	498,093
1993	16	120	42	501	38,345	221,327	9,530	70,589	6,315	23,374	4,388	29,887	58,620	345,678
Averages										***				
1974-93	7	53	8	117	8,819	53,428	3,934	31,402	8,112	30,273	4,430	32,877	25,302	148,097
1983-92	11	75	12	179	15,210	92,148	6,951	56,782	11,596	43,220	4,971	35,892	38,740	228,220

<sup>&</sup>lt;sup>a</sup> Added all drift gillnet and beach seine landings to purse seine catch.

Table 60. Kenmore Head to Scotch Cap post June, July 5-December 31, salmon harvest by species, all gear combined, 1970-93.

		_	Chir	100k	Soci	keye	Coh	10	Pin	<u> </u>	Chum	<del></del>	Tot	al
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pound	Number	Pounds	Number	Pounds	Number	Pounds
1970	23	40	8	195	3,180	21,625	17	131	3,816	15,264	3,763	22,578	10,784	59,793
1971	88	294	37	590	58,241	349,214	428	2,885	1,606	5,475	56,574	367, <b>7</b> 72	116,886	725,936
1972	31	85	2	20	4,589	28,261	51	392	57	218	12,159	88,091	16,858	116,982
1973	18	23	0	0	1,659	11,633	21	103	41	174	1,102	7,544	2,823	19,454
1974	30	78	6	103	11,957	64,114	1,095	7,354	1,451	5,976	2,097	15,009	16,606	92,556
1975	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	8	10	0	0	22	152	2	15	46,919	178,216	1,916	17,702	48,859	196,085
1979	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0
1980	9	12	0	0	497	2,357	57	356	48,637	167,701	236	1,529	49,427	171,943
1981	10	17	76	1,318	9,232	53,536	653	3,993	7,065	19,936	15,856	97,733	32,882	176,516
1982	42	193	141	2,160	17,013	99,841	25,327	168,063	43,925	146,900	19,938	139,420	106,344	556,384
1983	62	252	4,649	27,908	62,565	369,681	10,156	65,882	12,305	37,351	198,786	1,159,768	288,461	1,660,590
1984	79	581	549	7,694	66,550	386,228	63,753	432,521	328,797	1,149,936	153,753	1,032,456	613,402	3,008,835
1985	59	394	55	1,007	35,829	200,634	28,003	203,210	34,716	132,227	28,665	198,410	127,268	735,488
1986	54	442	109	2,158	60,261	373,662	25,467	171,019	59,932	208,143	38,194	270,360	183,963	1,025,342
1987	74	386	115	2,469	47,965	296,668	33,074	224,429	4,981	17,627	47,542	320,106	133,677	861,299
1988	94	664	246	4,187	60,375	372,332	66,872	480,432	207,843	781,386	112,292	744,205	447,628	2,382,542
1989	126	734	439	7,390	114,595	687,877	102,961	700,929	82,693	308,369	82,899	560,789	383,587	2,265,354
1990	89	562	199	3,224	140,541	928,246	37,681	251,787	51,047	171,569	79,160	449,310	308,628	1,804,136
1991	58	315	150	2,095	32,838	196,497	66,965	401,568	37,543	136,039	37,309	241,018	174,805	977,217
1992	62	419	71	1,078	59,513	355,270	74,521	484,773	238,779	833,482	43,613	305,206	416,497	1,979,809
1993	46	242	119	1,494	26,401	156,947	28,677	175,840	13,547	47,349	19,259	132,793	88,003	514,423
Averages														
1974-93	45	265	346	3,214	37,308	227,202	28,263	188,609	61,009	217,110	44,076	284,291	171,002	920,426
1984-93	74	474	205	3,280	64,487	395,436	52,797	352,651	105,988	378,613	64,269	425,465		1,555,445

Table 61. Kenmore Head to Scotch Cap post June, July 5-December 31, salmon harvest by species, purse seine gear, 1970-93.

			Chin	ook	Soci	ceye	Coh	10	Pink	· · · · · · · · · · · · · · · · · · ·	Chum		То	Total	
Year	Permits L	andings	Number	Pounds	Number	Pounds	Number	Pound	Number	Pounds	Number	Pounds	Number	Pounds	
1970	6	8	0	0	1,100	7,480	2	15	3,190	12,760	1,502	9,012	5,794	29,267	
1971	12	29	12	194	10,667	64,002	75	510	531	1,809	8,367	54,392	19,652	120,907	
1972	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1973	0	0	0	0	0	0	0	0	0	0	0	0	0		
1974	5	9	0	0	4,822	24,893	6	37	38	168	42	300	4,908	25,398	
1975	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	
1976	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1977	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1978	8	10	0	0	22	152	2	15	46,919	178,216	1,916	17,702	48,859	196,085	
1979	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1980	6	6	0	0	63	336	45	260	48,282	166,563	203	1,277	48,593	168,436	
1981	5	8	76	1,318	7,712	43,826	623	3,808	7,019	19,811	15,578	95,850	31,008	164,613	
1982	11	18	45	647	2,302	12,820	5,264	34,515	16,233	49,682	5,478	38,048	29,322	135,712	
1983	31	111	4,544	26,578	37,376	218,976	7,993	50,230	11,203	33,386		1,051,739		1,380,909	
1984	36	103	347	5,095	26,014	149,744	16,543	110,161	240,718	835,447	114,246	757,410		1,857,857	
1985	17	21	10	273	4,470	24,372	1,322	9,201	8,889	33,758	3,670	23,806	18,361	91,410	
1986	19	44	53	1,134	13,360	82,109	1,016	7,158	25,396	87,430	7,975	52,250	47,800	230,081	
1987	9	15	35	993	3,445	18,719	120	795	1,690	6,747	4,604	30,631	9,894	57,885	
1988	24	54	94	1,819	15,553	90,794	557	3,742	81,454	284,803	59,136	344,375	156,794	725,533	
1989	35	62	81	1,399	21,664	126,476	8,547	55,976	19,030	62,113	39,020	243,122	88,342	489,086	
1990	17	29	54	979	17,532	97,122	184	1,197	28,811	90,490	39,284	159,570	85,865	349,358	
1991	10	14	46	509	3,459	20,299	4,744	28,645	8,540	25,766	5,434	30,655	22,223	105,874	
1992 1993	10	35	15	276	3,450	20,537	5,388	33,676	137,906	470,874	8,738	62,183	155,497	587,546	
verages							****								
.974-93	12	27	270	2,051	8,069	46,607	2,618	16,971	34,106	117,263	24,370	145,446	69,433	328,337	
.984-93	18	38	74	1,248	10,908	63,113	3,842	25,055	55,243	189,743	28,211	170,400	98,278	449,559	

<sup>&</sup>lt;sup>a</sup> Confidentiality requirements prohibit reporting the harvest.

Table 62. Kenmore Head to Scotch Cap post June, July 5-December 31, salmon harvest by species, set gillnet, 1970-93.

Year Pe	1 4 2 2 2 3	Number 0	Pounds 0	Number	Pounds	Number	Pound	Number	D3-	M			D . 1
1971		_	0					Number	Pounds	Number	Pounds	Number	Pounds
		^		127	864	0	0	16	64	166	996	309	1,924
1972	2 3	U	0	165	990	2	14	3	10	158	1,027	328	2,041
	-	0	0	22	136	6	46	17	64	71	517	116	763
1973	1 1	0	0	27	220	0	0	1	4	13	80	41	304
1974	0 0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0 0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0 0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0 0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0 0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0 0	0	0	0	0	0	0	0	0	0	0	0	0
1980	1 4	0	0	36	234	12	96	343	1,098	25	191	416	1,619
1981	3 7	0	0	142	870	30	185	46	125	143	1,170	361	2,350
1982	5 27	7	91	1,851	11,473	1,080	6,891	2,333	7,794	189	1,385	5,460	27,634
1983	8 57	32	454	8,101	51,174	393	2,968	303	1,210	1,307	9,471	10,136	65,277
1984	6 168	42	796	13,880	80,992	9,510	66,403	17,402	64,963	8,980	63,973	49,814	277,127
1985	9 192	21	346	13,546	79,328	8,860	66,544	4,395	18,153	6,836	49,841	33,658	214,212
1986	7 156	32	598	16,645	103,463	5,557	36,107	6,764	23,180	7,940	56,489	36,938	219,837
1987	11 97	20	446	9,690	61,347	2,735	17,796	434	1,680	3,432	23,980	16,311	105,249
1988	7 140	57	933	10,010	63,545	8,633	59,987	16,095	66,186	6,232	46,993	41,027	237,644
1989	11 116	68	1,332	12,518	75,216	10,713	73,089	2,889	11,565	3,644	26,397	29,832	187,599
1990	8 89	26	421	13,737	91,233	3,671	24,393	1,818	6,323	2,346	16,859	21,598	139,229
1991	5 64	42	691	7,658	46,126	11,006	68,583	2,263	8,779	6,410	42,926	27,379	167,105
1992	10 72	9	124	11,128	66,249	10,512	70,827	9,767	34,735	5,623	39,910	37,039	211,845
1993	4 26	8	122	2,843	17,133	2,313	14,040	1,510	5,493	1,388	9,516	8,062	46,304
Averages													
1974-93	5 61	18	318	6,089	37,419	3,751	25,395	3,318	12,564	2,725	19,455	15,902	95,152
1984-93	8 112	32	581	11,166	68,463	7,351	49,777	6,334	24,106	5,283	37,688	30,166	180,615

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Table 63. Kenmore Head to Scotch Cap post June, July 5-December 31, salmon harvest by species, drift gillnet gear, 1970-93.

		_	Chir	nook	Soci	Sockeye		10	Pink		Chum		Tot	al
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pound	Number	Pounds	Number	Pounds	Number	Pounds
1970	17	28	8	195	1,953	13,281	15	116	610	2,440	2,095	12,570	4,681	28,602
1971	78	263	25	396	47,409	284,222	351	2,361	1,072	3,656	48,049	312,353	96,906	602,988
1972	30	82	2	20	4,567	28,125	45	346	40	154	12,088	87,574	16,742	116,219
1973	17	22	0	0	1,632	11,413	21	103	40	170	1,089	7,464	2,782	19,150
1974	25	69	6	103	7,135	39,221	1,089	7,317	1,413	5,808	2,055	14,709	11,698	67,158
1975	0	0	0	0	0	. 0	. 0	0	0	0	. 0	. 0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	a	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	2	2	0	0	398	1,787	0	0	12	40	8	61	418	1,888
1981	2	2	0	0	1,378	8,840	0	0	0	0	135	713	1,513	9,553
1982	26	148	89	1,422	12,860	75,548	18,983	126,657	25,359	89,424	14,271	99,987	71,562	393,038
1983	23	84	73	876	17,088	99,531	1,770	12,684	799	2,755	15,400	98,558	35,130	214,404
1984	37	310	160	1,803	26,656	155,492	37,700	255,957	70,677	249,526	30,527	211,073	165,720	873,851
1985	33	181	24	388	17,813	96,934	17,821	127,465	21,432	80,316	18,159	124,763	75,249	429,866
1986	28	242	24	426	30,256	188,090	18,894	127,754	27,772	97,533	22,279	161,621	99,225	575,424
1987	54	274	60	1,030	34,830	216,602	30,219	205,838	2,857	9,200	39,506	265,495	107,472	698,165
1988	63	470	95	1,435	34,812	217,993	57,682	416,703	110,294	430,397	46,924	352,837	249,807	1,419,365
1989	80	556	290	4,659	80,413	486,185	83,701	571,864	60,774	234,691	40,235	291,270	265,413	1,588,669
1990	64	444	119	1,824	109,272	739,891	33,826	226,197	20,418	74,756	37,530	272,881	201,165	1,315,549
1991	43	237	62	895	21,721	130,072	51,215	304,340	26,740	101,494	25,465	167,437	125,203	704,238
1992	42	312	47	678	44,935	268,484	58,621	380,270	91,106	327,873	29,252	203,113	223,961	1,180,418
1993	41	215	111	1,372	23,421	138,858	26,364	161,800	12,037	41,856	17,871	123,277	79,804	467,163
Averages														
1974-93	28	177	58	846	23,149	143,176	21,894	146,242	23,585	87,283	16,981	119,390	85,667	496,937
1984~93	49	324	99	1,451	42,413	263,860	41,604	277,819	44,411	164,764	30,775	217,377	159,302	925,271
1501 55			, , ,	-, .51	.2, 113	200,000	12/002	,013	11,111	202,701	30,773	22.,377	200,002	2221211

Table 64. Shumagin Islands Section post June, July 5-December 31, salmon harvest by species, all gear combined, 1970-93.

			Chinook		Sockeye		Coho Pink		Chum		Total			
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	49	464	722	11,782	14,569	99,081	30,050	231,411	482,905	1,931,620	112,808	676,848	641,054	2,950,742
1971	52	694	1,098	17,975	39,847	239,082	16,065	109,252	470,214	1,598,727		1,881,682	816,819	3,846,718
1972	44	395	612	9,767	17,114	115,823	7,673	53,728	33,721	134,749	95,734	581,877	154,854	895,944
1973	28	210	115	1,177	13,297	96,958	5,918	38,666	17,294	65,198	31,619	247,792	68,243	449,791
1974	36	162	441	3.798	26,174	151,263	8,025	54,408	33,934	134,161	28,535	213,294	97,109	556,924
1975	Ü	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	42	127	Õ	Ō	3	22	3	24	303,422	1,296,106	7,968	55,323	311,396	1,351,475
1977	2	5	0	0	97	673	74	526	0	0	38	245	209	1,444
1978	69	643	189	3,805	51,261	321,719	40,433	266,434	1,213,961	4,099,650		1,226,323	1,470,774	5,917,931
1979	91	937	910	12,597	141,692	919,083		2,070,800	2,068,996	7,526,619	91,347	628,474		11,157,573
1980	81	1.084	1.380	16,234	138,445	812,991		1,289,640	1,545,827	4,883,522		1,657,725	2,181,587	8,660,112
1981	92	893	4,038	46,216	118,139	753,906	126,955	838,818	1,364,370	5,014,956		2,129,920	1,923,228	8,783,816
1982	89	963	1,967	28,044	67,239	411,878		1,445,921	1,637,042	5,358,147		2,175,349	2,208,081	9,419,339
1983	92	864	6,547	63,046	108,365	696,319	92,403	650,444	900,726	3,415,434		1,412,120	1,328,865	6,237,363
1984	90	858	3,222	45,825	96,149	588,078		1,490,819	1,786,737	6.760.823		1,788,749		10,674,294
1985	109	932	511	10,034	107,792	588.338	113,193	789,869	1,627,627	6,612,971		1,232,239	2,054,772	9,233,451
1986	99	1,352	3,149	43,246	341,966			1,288,401	1,497,905	5,295,195		3,948,677		12,917,014
1987	120	1,210	3,388	42,581		1,794,395		1,100,755	542,383	1,901,113		2,176,974		7,015,818
1988	120	2,041	5,955	85,483	416,917			2,489,831	3,396,332			3,044,897		20,578,694
1989	141	1,571	2,502	41,485	418,124			1,665,191	2,026,996	7,569,992		1,607,247		13,481,156
1990	139	1,446	4,939	63,261	424,219 2			1,266,979	1,106,828	3,640,702		2,069,592		9,754,237
1991	136	1,331	1,706	22,922		1,341,495	146,677	881,870	2,150,890	6,616,907		1,403,725		10,266,919
1992	129	1,437	2,750	35,062	252,526			1,471,832	2,296,809	8,004,316		1,547,895		12,623,715
1993	111	1,013	2,578	28,318	197,212		129,315	776,069	3,329,474	10,991,158	121,929	735,815	3,780,508	13,743,628
Averages														
1970-93	82	860	2,030	26,361	143,982	920,889	127,563	844,654	1,243,100	4,377,901	200.982	1,351,783	1,717,658	7,521,587
1974-93	89	943	2,309	29,598	168,537		150,091	991,932	1,441,513	5,066,967		1,452,729	1,977,141	8,618,745
1984-93	119	1,319	3,070	41,822		1,748,255		1,322,162	1,976,198	6,961,074		1,955,581		12,028,893

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Table 65. Shumagin Islands Section post June, July 5-December 31, salmon harvest by species, purse seine gear only, 1970-93.

			Chi	nook	Soc	keye	Col	10	Pi	nk	Ch	num	To	tal
Year	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	44	415	722	11,782	13,669	92,958	29,854	229,901	476,936	1,907,744	108,859	653,154	630,040	2,895,539
1971	44	618	1,093	17,895	36,023	216,138	15,944	108,429	467,703	1,590,188	284,007	1,845,321	804,770	3,777,971
1972	39	359	608	9,728	16,239	110,425	7,649	53,543	33,067	132,268	93,229	563,614	150,792	869,578
1973	21	154	114	1,167	9,352	67,690	5,811	37,983	16,102	60,232	29,708	233,146	61,087	400,218
1974	26	117	432	3,695	23,852	136,058	8,005	54,282	33,106	130,680	27,370	204,738	92,765	529,453
1975	0	0	0	0	0	0	.0	0	0	0	0	0	0	0
1976	42	127	0	0	3	22	3	24	303,422	1,296,106	7,968	55,323	311,396	1,351,475
1977	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	51	513	182	3,575	46,478	287,796	39,807	261,968	1,198,020	4,040,475	153,278	1,138,895	1,437,765	5,732,709
1979	69	802	906	12,507	130,278	840,446	310,228	2,047,200	2,034,994	7,392,866	86,534	592,798		10,885,817
1980	65	936	1,377	16,177	122,631	707,172	232,070	1,280,229	1,528,398	4,818,171	248,680	1,563,398	2,133,156	8,385,147
1981	69	739	4,031	46,095	104,618	664,264	125,838	830,807	1,330,047	4,887,900	298,336	2,054,910	1,862,870	8,483,976
1982	65	811	1,951	27,796	61,276	371,078	203,752		1,615,458	5,280,547		2,091,352	2,165,634	9,193,208
1983	69	738	6,513	62,715	96,513	615,061	90,220	632,869	891,237	3,374,778		1,373,382	1,299,748	6,058,805
1984	65	603	3,161	44,939	75,357	446,940	207,577	1,457,826	1,730,094	6,521,708		1,690,886	2,262,140	10,162,299
1985	66	671	490	9,458	92,645	496,848	109,746	763,553	1,564,791	6,346,012		1,153,112	1,961,566	
1986	64	911	3,102	42,443	282,235	1,922,747	198,490	1,267,528	1,462,948	5,158,856	537,754	3,806,363	2,484,529	12,197,937
1987	72	676	3,337	41,509	183,576	1,319,152	152,025	1,056,639	521,872	1,820,117	285,677	1,996,794	1,146,487	6,234,211
1988	72	1,140	5,862	83,412	326,863	2,116,075	340,745	2,409,980	3,221,597	11,523,033	385,772	2,821,920	4,280,839	18,954,420
1989	83	641	2,315	38,602	251,880	1,498,125	228,086	1,507,653	1,872,541	6,954,472	211,173	1,411,500	2,565,995	11,410,352
1990	82	723	4,748	60,247	260,225	1,651,550	168,410	1,158,763	1,071,568	3,525,196	308,035	1,816,042	1,812,986	8,211,798
1991	76	476	1,099	15,493	87,380	510,118	125,881	747,149	2,021,704	6,175,284	161,630	1,023,557		8,471,601
1992	73	579	2,507	31,808	118,420	691,381	209,569	1,307,140	2,070,119	7,178,550	201,258	1,291,386	2,601,873	10,500,265
1993	61	486	2,263	25,067	121,014	726,652	109,888	647,094	3,186,831	10,501,647	108,498	647,760	3,528,494	12,548,220
Averages														
1970-93	55	551	1.951	25,255	102,522	645,362	121,650	803,458	1,193,856	4,192,368	186.503	1,251,223	1,606,482	6,917,666
1974-93	59	584	2,214	28,277	119,262	750,074	143,017	942,657	1,382,937	4,846,320		1,336,706	1,845,444	7,904,034
1984-93	71	691	2,888	39,298		1,137,959	185,042		1,872,407	6,570,488		1,765,932		10,746,009
1,0. ,0	. –		_,	,	,	_,,	,	_,,_	_, _ , _ , _ ,			,	, , 200	, ,

Table 66. Shumagin Islands Section post June, July 5-December 31, salmon harvest by species, set gillnet gear only, 1970-93.

			Chi	nook	So	ckeye	Cc	ho	Pi	nk	C	num	7	otal
Year	Permits I	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	10	41	0	0	691	4,701	188	1,448	5,163	20,652	3,109	18,654	9,151	45,455
1971	10	76	5	80	3,824	22,944	121	823	2,511	8,539	5,588	36,361	12,049	68,747
1972	6	36	4	39	875	5,398	24	185	654	2,481	2,505	18,263	4,062	26,366
1973	9	5 <i>6</i>	1	10	3,945	29,268	107	683	1,192	4,966	1,911	14,646	7,156	49,573
1974	17	45	9	103	2,322	15,205	20	126	828	3,481	1,165	8,556	4,344	27,471
1975	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	2	5	0	0	97	673	74	526	0	0	38	245	209	1,444
1978	19	130	7	230	4,783	33,923	626	4,466	15,941	59,175	11,652	87,428	33,009	185,222
1979	24	134	4	90	11,414	78,637	3,235	23,600	32,532	128,433	4,813	35,676	51,998	266,436
1980	16	148	3	57	15,814	105,819	1,397	9,411	17,429	65,351	13,680	94,327	48,431	274,965
1981	23	154	7	121	13,521	89,642	1,117	8,011	34,323	127,056	11,390	75,010	60,358	299,840
1982	23	149	16	248	5,951	40,723	3,086	23,486	20,566	74,513	9,979	72,560	39,598	211,530
1983	23	126	34	331	11,852	81,258	2,183	17,575	9,489	40,656	5,559	38,738	29,117	178,558
1984	25	255	61	886	20,792	141,138	4,071	32,993	56,643	239,115	13,546	97,863	95,113	511,995
1985	43	261	21	576	15,147	91,490	3,447	26,316	62,836	266,959	11,755	79,127	93,206	464,468
1986	35	441	47	803	59,731	418,748	3,028	20,873	34,957	136,339	19,653	142,314	117,416	719,077
1987	48	534	51	1,072	65,358	475,243	5,911	44,116	20,511	80,996	24,863	180,180	116,694	781,607
1988	48	901	93	2,071	90,054	624,849	10,373	79,851	174,735	694,526	29,536	222,977	304,791	1,624,274
1989	57	924	131	2,297	164,545	1,090,757	20,674	141,991	150,927	603,840	27,454	191,266	363,731	2,030,151
1990	56	716	168	2,811	163,028	1,057,029	13,718	98,472	30,785	101,928	36,061	241,320	243,760	1,501,560
1991	59	842	297	4,304	124,711	817,442	16,965	114,577	119,134	411,992	50,037	346,242	311,144	1,694,557
1992	55	845	150	2,187	131,886	861,522	20,856	143,967	217,219	799,104	32,696	230,438	402,807	2,037,218
1993	49	521	71	1,000	74,437	476,261	14,535	101,767	139,699	480,713	12,604	83,867	241,346	1,143,608
Averages														
1970-93	27	306	49	805	41,032	273,445	5,240	37,303	47,836	181,284	13,738	96.502	107,895	589,338
1974-93	31	357	59	959	48,772	325,018	6,266	44,606	56,928	215,709	15,829	111,407	127,854	697,699
1984-93	48	624	109	1,801	90,969	605,448	11,358	80,492	100,745	381,551	25,821	181,559	229,001	1,250,852

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Table 67. South Peninsula salmon runs by species, 1962-93.<sup>a</sup>

Year		Chinook	Sockeye	Coho	Pink	Chum
1962	Catch Escapement Total	3,300 0 3,300	420,000 18,800 438,800	12,500	1,965,400 1,598,800 3,564,200	824,800 399,400 1,224,200
1963	Catch	1,900	204,400	16,500	2,367,700	461,300
	Escapement	0	23,000	-	1,317,900	446,700
	Total	1,900	227,400	-	3,685,600	908,000
1964	Catch	2,000	370,800	13,600	2,740,300	751,000
	Escapement	0	15,700	-	1,436,400	454,800
	Total	2,000	386,500	-	4,176,700	1,205,800
1965	Catch	2,100	915,700	34,200	2,884,100	556,400
	Escapement	0	12,100	-	1,035,400	228,000
	Total	2,100	927,800	-	3,919,500	784,400
1966	Catch	1,400	606,200	6,300	305,800	494,400
	Escapement	0	17,000	-	719,400	422,000
	Total	1,400	623,200	-	1,025,200	916,400
1967	Catch Escapement Total	1,600 0 1,600	294,100 16,200 310,300	2,900	78,300 445,500 523,800	245,200 182,900 428,100
1968	Catch Escapement Total	1,400 0 1,400	699,800 12,800 712,600	31,100	1,287,100 823,300 2,110,400	325,300 279,100 604,400
1969	Catch	1,900	912,800	10,900	1,219,100	389,200
	Escapement	0	29,500	-	2,474,900	134,600
	Total	1,900	942,300	-	3,694,000	523,800
1970	Catch	1,800	1,799,500	32,600	1,738,000	993,300
	Escapement	0	16,500	-	1,298,900	280,500
	Total	1,800	1,816,000	-	3,036,900	1,273,800
1971	Catch	2,200	716,100	16,900	1,445,000	1,366,000
	Escapement	0	19,400	-	702,700	343,200
	Total	2,200	735,500	-	2,147,700	1,709,200
1972	Catch	1,300	557,400	8,000	78,200	731,800
	Escapement	0	11,900	-	111,400	254,500
	Total	1,300	569,300	-	189,600	986,300
1973	Catch	400	330,100	6,600	58,100	292,900
	Escapement	0	7,300	-	110,800	505,500
	Total	400	337,400	-	168,900	798,400
1974	Catch	600	197,200	9,400	100,600	71,800
	Escapement	0	95,600	-	284,400	257,300
	Total	600	292,800	-	385,000	329,100

Table 67. (page 2 of 3)

Year		Chinook	Sockeye	Coho	Pink	Chum
1975	Catch Escapement Total	100 0 100	243,500 51,700 295,200	100	60,600 552,100 612,700	130,800 193,300 324,100
1976	Catch	2,200	375,000	200	2,366,800	532,500
	Escapement	0	69,700	-	1,456,400	327,200
	Total	2,200	444,700	-	3,823,200	859,700
1977	Catch Escapement Total	600 0 600	311,700 64,900 376,600	2,100	1,448,600 2,677,800 4,126,400	243,200 774,900 1,018,100
1978	Catch	800	579,400	60,700	5,490,100	546,200
	Escapement	0	64,800	-	2,858,700	600,500
	Total	800	644,200	-	8,348,800	1,146,700
1979	Catch	2,100	1,149,900	356,900	6,564,900	482,900
	Escapement	0	53,300	-	2,629,500	411,100
	Total	2,100	1,203,200	-	9,194,400	894,000
1980	Catch	4,800	3,613,000	274,200	7,861,500	1,351,100
	Escapement	0	45,900	-	2,641,600	362,400
	Total	4,800	3,658,900	-	10,503,100	1,713,500
1981	Catch Escapement Total	11,200 0 11,200	2,241,500 45,700 2,287,200	162,200	5,033,000 2,307,500 7,340,500	1,768,500 381,300 2,149,800
1982	Catch	9,800	2,346,000	256,000	6,734,900	2,272,500
	Escapement	0	39,200	-	2,293,000	386,900
	Total	9,800	2,385,200	-	9,027,900	2,659,400
1983	Catch Escapement Total	26,600 0 26,600	2,556,600 59,200 2,615,800	127,700	2,827,600 851,200 3,678,800	1,704,100 446,500 2,150,600
1984	Catch Escapement Total	9,200 0 9,200	2,318,000 54,800 2,372,800	311,000	11,589,300 3,811,600 15,400,900	1,654,600 699,700 2,354,300
1985	Catch	6,600	2,144,400	172,500	4,431,000	1,348,700
	Escapement	0	49,900	-	1,614,100	503,400
	Total	6,600	2,194,300	-	6,045,100	1,852,100
1986	Catch	5,600	1,223,100	235,900	4,031,500	1,749,700
	Escapement	0	48,000	-	1,716,700	544,600
	Total	5,600	1,271,100	-	5,748,200	2,294,300
1987	Catch	9,200	1,449,800	225,100	1,208,600	1,376,900
	Escapement	0	44,600	-	1,540,500	620,700
	Total	9,200	1,494,400	-	2,749,100	1,997,600

Table 67. (page 3 of 3)

Year		Chinook	Sockeye	Coho	Pink	Chum
1988	Catch Escapement Total	11,100 0 11,100	1,473,700 74,100 1,547,800	505,500	7,044,800 2,839,600 9,884,400	1,908,500 496,400 2,404,900
1989	Catch Escapement Total	7,100 0 7,100	2,660,800 78,100 2,738,900	443,800 - -	7,292,700 1,870,900 9,163,600	994,200 310,500 1,304,700
1990	Catch Escapement Total	16,500 0 16,500	2,386,800 95,300 2,482,100	307,200 (75.0-100.0) <sup>b</sup> 367.2-397.2 <sup>b</sup>	•	1,237,800 354,700 1,592,500
1991	Catch Escapement Total	8,000 0 8,000	2,319,900 124,900 2,444,800	317,100	10,616,800 2,946,800 13,563,600	1,588,800 587,600 2,176,400
1992	Catch Escapement Total	8,000 0 8,000	3,445,900 97,600 3,543,500	418,200 - -	9,770,400 2,834,400 12,604,800	1,316,700 335,500 1,652,200
1993	Catch Escapement Total	14,400 0 14,400	3,689,100 100,300 3,789,400	220,100	9,928,100 2,990,100 12,918,200	1,048,300 397,000 1,445,300

Numbers of fish in thousands.
 Escapements are indexed totals. Figures in parenthesis are rough extrapolated estimates.

Table 68. South Peninsula pink salmon runs, 1962-93.

			June Migrants				
		Southeastern	Southwestern		June	Migrants	
		and	and	South	Canal		Total
Year		South Central Districts	Unimak Districts	Peninsula Totals	South Unimak	Shumagins	June Migrants
		Districts	Districts	Totals			
1962	Catch	922,100	977,300	1,899,400	42,000	24,000	66,000
	Escapement	826,100	772,700	1,598,800			
	Total	1,748,200	1,750,000	3,498,200			
1963	Catch	1,733,900	590,800	2,324,700	14,000	29,000	43,000
	Escapement	886,500	431,400	1,317,900			
	Total	2,620,400	1,022,200	3,642,200			
1964	Catch	1,514,600	1,190,700	2,705,300	18,000	17,000	35,000
	Escapement	902,400	534,000	1,436,700			
	Total	2,417,000	1,724,700	4,141,700			
1965	Catch	2,331,400	474,700	2,806,100	43,000	35,000	78,000
	Escapement		245,500	1,035,400			
	Total	3,121,300	720,200	3,841,500			
1966	Catch	220,300	68,500	288,800	15,000	2,000	17,000
	Escapement	627,400	92,000	719,400			
	Total	847,700	160,500	1,008,200			
1967	Catch	53,100	4,200	57,300	11,000	10,000	21,000
	Escapement		118,200	445,500			
	Total	380,400	122,400	502,800			
1968	Catch	863,300	277,800	1,141,100	34,000	112,000	146,000
	Escapement		295,200	823,300			
	Total	1,391,400	573,000	1,964,400			
1969	Catch	862,800	265,300	1,128,100	68,000	23,000	91,000
	Escapement	1,906,200	568,700	2,474,900			
	Total	2,769,000	834,000	3,603,000			
1970	Catch	1,366,100	250,300	1,616,400	83,000	24,000	107,000
	Escapement	1,007,900	291,000	1,298,900			
	Total	2,374,000	541,300	2,915,300			
1971	Catch	1,212,100	214,000	1,426,100	15,000	9,000	24,000
	Escapement	488,000	214,700	702,700			
	Total	1,700,100	428,700	2,128,800			

<sup>-</sup>Continued-

Table 68. (page 2 of 4)

		Not including Southeastern	Southwestern		Inne	Migrants	
Year		and South Central Districts	and Unimak Districts	South Peninsula Totals	South	Shumagins	Total June Migrants
1972	Catch	51,200	8,800	60,000	12,000	6,000	18,000
	Escapement	81,800	29,600	111,400			
	Total	133,000	38,400	171,400			
1973	Catch	35,100	1,200	36,300	12,000	10,000	22,000
	Escapement	85,700	25,100	110,800			
	Total	120,800	26,300	147,100			
1974	Catch	95,500	4,700	100,200	0	0	C
	Escapement	238,600	45,800	284,400			
	Total	334,100	50,500	384,600			
1975	Catch	30,400	26,300	56,700	3,000	2,000	5,000
	Escapement	357,800	194,300	552,100			
	Total	388,200	220,600	608,800			
1976	Catch	2,035,900	307,100	2,343,000	18,000	6,000	24,000
	Escapement	1,084,000	372,400	1,456,400			
	Total	3,119,900	679,500	3,799,400			
1977	Catch	1,163,400	280,200	1,443,600	3,000	2,000	5,000
	Escapement	2,168,500	509,300	2,677,800			
	Total	3,331,900	789,500	4,121,400			
1978	Catch	4,067,300	1,332,700	5,400,000	47,000	43,000	90,000
	Escapement	1,966,300	892,400	2,858,700			
	Total	6,033,600	2,225,100	8,258,700			
1979	Catch	4,845,000	1,562,600	6,407,600	57,000	106,000	163,000
	Escapement	2,125,100	504,400	2,629,500			
	Total	6,970,100	2,067,000	9,037,100			
1980	Catch	2,439,600	3,815,600	6,255,200	1,141,000	466,000	1,607,000
	Escapement	1,410,400	1,231,200	2,641,600			
	Total	3,850,000	5,046,800	8,896,800			
1981	Catch	4,196,400	378,500	4,574,900	332,000	129,000	461,000
	Escapement	1,875,000	431,800	2,306,800			
	Total	6,071,400	810,300	6,881,700			

Table 68. (page 3 of 4)

		Southeastern	Southwestern		June		
Year		and South Central Districts	and Unimak Districts	South Peninsula Totals	South Unimak	Shumagins	Total June Migrants
1982	Catch	4,104,900	906,100	5,011,000	1,037,000	687,000	1,724,000
	Escapement	1,533,200	759,800	2,293,000	1,001,000	007,000	1,721,000
	Total	5,638,100	1,665,900	7,304,000			
1983	Catch	2,245,800	526,800	2,772,600	40,000	15,000	55,000
	Escapement	639,200	212,000	851,200			
	Total	2,885,000	738,800	3,623,800			
1984	Catch	6,533,100	4,136,300	10,669,400	490,000	449,000	939,000
	Escapement	2,526,700	1,824,900	3,811,600			
	Total	9,059,800	5,421,200	14,481,000			
1985	Catch	3,324,800	999,900	4,324,700	72,000	37,000	109,000
	Escapement	1,229,300	384,500	1,613,800			
	Total	4,554,100	1,384,400	5,938,500			
1986	Catch	3,066,900	673,500	3,740,400	150,000	141,000	291,000
	Escapement	1,185,500	531,200	1,716,700			
	Total	4,252,400	1,204,700	5,457,100			
1987	Catch	1,143,400	48,100	1,191,500	11,000	6,000	17,000
	Escapement	1,304,400	236,100	1,540,500			
	Total	2,447,800	284,200	2,732,000			
1988	Catch	4,662,300	2,164,100	6,826,400	87,000	132,000	219,000
	Escapement	1,636,500	1,203,100	2,839,600			
	Total	6,298,800	3,367,200	9,666,000			
1989	Catch	5,582,300	1,511,300	7,093,600	154,000	45,000	199,000
	Escapement	1,179,200	691,600	1,870,800			
	Total	6,761,500	2,202,900	8,964,400			
1990	Catch	1,738,600	612,300	2,350,900	444,000	71,000	515,000
	Escapement	1,018,200	580,200	1,598,400			
	Total	2,756,800	1,192,500	3,949,300			
1991	Catch	7,549,900	2,446,800	9,996,700	501,000	118,000	619,000
	Escapement Total	2,268,400 9,818,300	678,400 3,125,200	2,946,800 12,943,500			

Table 68. (page 4 of 4)

		Southeastern	Southwestern	June			
		and	and	South			Total
		South Central	Unimak	Peninsula	South		June
Year		Districts	Districts	Totals	Unimak	Shumagins	Migrants
1992	Catch	5,002,900	4,266,300	9,269,200	501,000	141,000	642,000
	Escapement	1,781,000	1,053,400	2,834,400	•		
	Total	6,783,900	5,319,700	12,103,600			
1993	Catch	7,493,900	2,353,200	9,847,100	38,000	43,000	81,000
	Escapement	2,232,200	757,900	2,990,100			
	Total	9,726,100	3,111,100	12,837,200			

Table 69. South Peninsula chum salmon runs, 1962-93.

		Southeastern	June Migrants Southwestern		Iune	Migrants	
		and	and	South	<u> </u>	IVIIGIO	Total
		South Central	Unimak	Peninsula	South		June
Year		Districts	Districts	Totals	Unimak	Shumagins	Migrants
1962	Catch	409,500	155,300	564,800	199,000	61,000	260,000
	Escapement	238,600	160,800	399,400	,	·	•
	Total	648,100	316,100	964,200			
1963	Catch	278,000	80,300	358,300	67,000	36,000	103,000
	Escapement	263,000	183,700	446,700			
	Total	541,000	264,000	805,000			
1964	Catch	378,800	153,300	532,100	153,000	67,000	220,000
	Escapement	160,800	294,000	454,800			
	Total	539,600	447,300	986,900			
1965	Catch	221,700	150,700	372,400	139,000	45,000	184,000
	Escapement	203,300	24,200	228,000			
	Total	425,000	175,400	600,400			
1966	Catch	221,400	36,000	257,400	220,000	17,000	237,000
	Escapement	354,800	67,200	422,000			
	Total	576,800	103,200	679,400			
1967	Catch	118,700	4,500	123,200	71,000	51,000	122,000
	Escapement	132,800	50,100	182,900			
	Total	251,500	54,600	306,100			
1968	Catch	121,400	47,600	169,000	105,000	51,000	156,000
	Escapement	191,700	87,400	279,100			
	Total	313,100	135,000	448,100			
1969	Catch	95,100	43,300	138,400	238,000	13,000	251,000
	Escapement	96,900	37,700	134,600			
	Total	192,000	81,000	273,000			
1970	Catch	482,400	87,200	569,600	363,000	49,000	412,000
	Escapement	171,700	108,800	280,500			
	Total	664,100	196,000	850,100			
1971	Catch	637,100	117,500	754,600	497,000	115,000	612,000
	Escapement	199,100	144,100	343,200			
	Total	836,200	261,600	1,097,800			

Table 69. (page 2 of 4)

			June Migrants		Ī	Minnes	
		Southeastern and	Southwestern and	South	June	Migrants	Total
		South Central	Unimak	Peninsula	South		June
Year		Districts	Districts	Totals		Shumagins	Migrants
1972	Catch	150,600	55,900	206,500	413,000	108,000	521,000
	Escapement	145,000	109,500	254,500	,	•	
	Total	295,600	165,400	461,000			
1973	Catch	67,100	12,100	79,200	178,000	36,000	214,000
	Escapement	130,900	81,600	212,500			
	Total	198,000	93,700	291,700			
1974	Catch	56,600	15,300	71,900	0	0	0
	Escapement	169,800	87,500	257,300			
	Total	226,400	102,800	329,200			
1975	Catch	29,900	4,000	33,900	64,000	35,000	99,000
	Escapement	160,200	33,100	193,300			
	Total	190,100	37,100	227,200			
1976	Catch	109,400	25,100	134,500	326,000	72,000	298,000
	Escapement	225,300	101,900	327,200			
	Total	334,700	127,000	461,700			
1977	Catch	109,400	18,800	128,200	93,000	22,000	115,000
	Escapement	500,900	274,000	774,900			
	Total	610,300	292,800	903,100			
1978	Catch	341,600	139,800	481,400	47,000	18,000	65,000
	Escapement	386,200	214,300	600,500			
	Total	727,800	254,100	1,081,900			
1979	Catch	280,400	97,600	378,000	64,000	41,000	105,000
	Escapement	302,700	108,400	411,100			
	Total	583,100	206,000	789,100			
1980	Catch	654,200	169,100	823,300	457,000	71,000	528,000
	Escapement	241,600	120,800	362,400			
	Total	895,800	289,900	1,185,700			
1981	Catch	966,100	229,200	1,195,300	521,000	54,000	575,000
	Escapement	234,500	146,800	381,300			
	Total	1,200,600	376,000	1,576,600			

Table 69. (page 3 of 4)

		Southeastern	June Migrants Southwestern		lune	Migrants	
		and	and	South			Total
		South Central	Unimak	Peninsula	South		June
Year		Districts	Districts	Totals		Shumagins	Migrants
1092	Catal	022.000	253,800	1,176,700	935,000	160,000	1,095,000
1982	Catch Escapement	922,900 203,000	183,900	386,900	933,000	100,000	1,095,000
	Total	1,125,900	437,700	1,536,600			
	lotai	1,123,900	437,700	1,330,000			
1983	Catch	600,300	322,600	922,900	615,000	169,000	784,000
	Escapement	328,900	117,600	446,500			
	Total	929,200	440,200	1,369,400			
1984	Catch	832,900	486,500	1,319,400	228,000	109,000	337,000
	Escapement	446,000	253,700	699,700			
	Total	1,278,900	740,200	2,019,100			
1985	Catch	539,200	375,700	914,900	345,000	133,000	478,000
	Escapement	284,700	218,800	503,500			
	Total	823,900	594,500	1,418,400			
1986	Catch	981,200	417,400	1,398,600	252,000	99,000	351,000
	Escapement		305,000	544,600			
	Total	1,220,800	722,400	1,943,200			
1987	Catch	753,200	180,000	933,200	406,000	37,000	443,000
	Escapement	329,200	291,500	620,700			
	Total	1,082,400	471,500	1,553,900			
1988	Catch	826,200	552,300	1,378,500	465,000	62,000	527,000
	Escapement	269,100	227,300	496,400			
	Total	1,095,300	779,600	1,874,900			
1989	Catch	420,900	117,300	538,200	408,000	48,000	456,000
	Escapement	189,200	121,300	310,500			
	Total	610,100	238,600	848,700			
1990	Catch	563,700	155,400	719,100	455,000	64,000	519,00
	Escapement		143,800	354,700			
	Total	774,600	299,200	1,073,800			
1991	Catch	578,000	238,000	816,000	669,000	103,000	772,000
	Escapement	345,400	242,200	587,600			
	Total	923,400	480,200	1,403,600			

Table 69. (page 4 of 4)

		Southeastern	June Migrants Southwestern		luna	Migrants	
		and	and	South	June	viigiants	Total
		South Central	Unimak	Peninsula	South		June
Year		Districts	Districts	Totals	Unimak	Shumagins	Migrants
1992	Catch	599,000	291,600	890,600	324,000	102,000	426,000
	Escapement	194,100	141,400	335,500			,
	Total	793,100	433,000	1,226,100			
1993	Catch	332,900	183,300	516,200	382,000	150,000	532,000
	Escapement	172,400	224,700	397,100			
	Total	505,300	408,000	913,300			

Table 70. South Peninsula total estimated escapement by species and district, 1986-93.

	Number of Salmon							
Year	Sockeye	Cohoª	Pink	Chum				
Southeastern								
1986	29,469	0	639,915	130,816				
1987	25,575	0	692,037	154,207				
1988	24,377	7,032	1,301,149	90,397				
1989	24,075	10,080	563,105	103,997				
1990	21,925	42,168	569,434	114,696				
1991	44,093	1,140	1,300,794	276,545				
1992	27,375	650	1,252,660	224,399				
1993	26,373	1,128	1,499,563	40,632				
1986-92 Average	28,127	8,724	902,728	156,437				
South Central								
1986	8,475	0	846,182	105,774				
1987	4,363	1,680	790,420	169,267				
1988	5,500	2,640	1,275,564	225,623				
1989	3,188	6,960	735,222	94,107				
1990	3,468	19,320	694,967	137,082				
1991	6,450	0	1,712,655	170,262				
1992	4,163	0	741,846	138,482				
1993	11,250	0	1,775,279	211,293				
1986-92 Average	5,087	4,371	970,979	148,657				
Southwestern								
1986	47,540	3,840	573,457	331,477				
1987	50,650	960	260,099	327,910				
1988	55,620	10,320	1,591,960	271,446				
1989	67,820	20,693	698,103	144,034				
1990	74,040	56,448	724,248	181,897				
1991	102,600	1,560	757,897	278,929				
1992	88,880	41,040	1,466,610	162,923				
1993	69,472	15,480	1,131,498	300,251				
1986-92 Average	69,593	19,266	867,482	242,659				
Unimak								
1986	9,840	12	13,267	400				
1987	0	0	300	493				
1988	0	0	26,987	1,313				
1989	0	0	616	321				
1990	14,800	960	19,540	710				
1991	0	0	5,620	540				
1992	0	0	27,360	170				
1993	0	0	3,034	1,070				
1986-92 Average	3,520	139	13,384	564				

Table 70. (page 2 of 2)

	Number of Salmon						
Year	Sockeye	Cohoª	Pink	Chum			
outh Peninsu	la						
1986	95,324	3,852	2,072,821	568,467			
1987	80,588	2,640	1,742,856	651,877			
1988	85,497	19,992	4,195,660	588,779			
1989	95,083	37,733	1,997,046	342,459			
1990	114,233	124,176	2,021,975	445,502			
1991	153,143	2,700	3,776,966	726,276			
1992	120,418	41,690	3,488,476	525,974			
1993	107,095	16,608	4,409,373	553,246			
986-92 Avera	•	33,255	2,756,543	549,905			

<sup>&</sup>lt;sup>a</sup> Coho escapement data for 1986, 1987, 1988, 1989, 1991, 1992, and 1993 are based on limited surveys.

Table 71. Chignik sockeye salmon contribution to the Southeastern District Mainland harvest, by gear, through July 25, 1970-93.

	· · · · · · · · · · · · · · · · · · ·	Catch	by Gear		
	Set	t Net	Purse	e Seine	_
Year	Number	Percent	Number	Percent	Total Catch
1970	63,688	94.2	3,894	5.8	67,582
1971	48,575	95.9	2,066	4.1	50,641
1972	15,593	92.4	1,291	7.6	16,884
1973	36,870	98.0	743	2.0	37,613
1974	52,798	81.8	11,766	18.2	64,564
1975	1,126	51.1	1,079	48.9	2,205
1976	40,399	93.2	2,957	6.8	43,356
1977	23,924	76.0	7,574	24.0	31,498
1978	20,174	91.9	1,778	8.1	21,952
1979	50,610	91.4	4,742	8.6	55,352
1980	58,190	91.5	5,380	8.5	63,570
1981	106,811	87.6	15,059	12.4	121,870
1982	57,646	91.8	5,121	8.2	62,767
1983	157,831	69.4	69,561	30.6	227,392
1984	404,738	95.7	18,330	4.3	423,068
1985	49,523	96.3	1,898	3.7	51,421
1986	110,572	93.7	7,434	6.3	118,006
1987	146,636	99.8	250	0.2	146,886
1988	16,465	85.2	2,855	14.8	19,320
1989	4,371	97.5	114	2.5	4,485
1990	65,671	51.1	62,928	48.9	128,599
1991	152,454	99.8	260	0.2	152,714
1992	93,564	99.7	281	0.3	93,845
1993 —————	109,119	84.9	19,417	15.1	128,536
Averages					
1970-93	78,640	87.9	10,282	12.1	88,922
1978-93	100,273	89.2	13,463	10.8	113,736

From 1970-91, the Chignik contribution is 80% of the sockeye salmon harvested in Beaver Bay, Balboa Bay, Southwest Stepovak, Stepovak Flats and East Stepovak Sections.

From 1992-93, the Chignik contribution is 80% of the sockeye salmon harvested in the Southeastern District Mainland fishery except Orzinski Bay where 100% of the sockeye salmon are considered local production.

Table 72. Southeastern District Mainland sockeye salmon catch, by gear, through July 25, 1970-93.

	·			
	Catch	by Gear		
Set	Net	Purse	Seine	
Number	Percent	Number	Percent	Total Catch
80,692	95.4	3,904	4.6	84,596
	95.9	2,587	4.1	63,354
19,491	92.4	1,614	7.6	21,105
46,141	97.9	976	2.1	47,117
66,101	74.9	22,129	25.1	88,230
1,807	57.3	1,349	42.7	3,156
52,414	90.2	5,712	9.8	58,126
30,658	70.5	12,827	29.5	43,485
28,930	92.7	2,267	7.3	31,197
77,604	87.5	11,136	12.5	88,740
89,743	93.0	6,729	7.0	96,472
181,698	90.1	20,013	9.9	201,711
79,442	91.5			86,793
213,051	71.0	87,107	29.0	300,158
567,043	95.3	28,000	4.7	595,043
78,347	96.8			80,957
196,545	95.2	•		206,532
•				244,895
•		•		81,160
				89,224
		•		164,028
		•		289,727
				215,444
186,656	88.5	24,271	11.5	210,927
125,062	88.5	16,278	11.5	141,341
165,214	88.6	21,224	11.4	186,438
	Number  80,692 60,767 19,491 46,141 66,101 1,807 52,414 30,658 28,930 77,604 89,743 181,698 79,442 213,051 567,043 78,347 196,545 244,413 77,204 46,977 85,368 275,768 214,638 186,656	Set Net  Number Percent  80,692 95.4 60,767 95.9 19,491 92.4 46,141 97.9 66,101 74.9 1,807 57.3 52,414 90.2 30,658 70.5 28,930 92.7 77,604 87.5 89,743 93.0 181,698 90.1 79,442 91.5 213,051 71.0 567,043 95.3 78,347 96.8 196,545 95.2 244,413 99.8 77,204 95.1 46,977 52.7 85,368 52.0 275,768 95.2 214,638 99.6 186,656 88.5	Number       Percent       Number         80,692       95.4       3,904         60,767       95.9       2,587         19,491       92.4       1,614         46,141       97.9       976         66,101       74.9       22,129         1,807       57.3       1,349         52,414       90.2       5,712         30,658       70.5       12,827         28,930       92.7       2,267         77,604       87.5       11,136         89,743       93.0       6,729         181,698       90.1       20,013         79,442       91.5       7,351         213,051       71.0       87,107         567,043       95.3       28,000         78,347       96.8       2,610         196,545       95.2       9,987         244,413       99.8       482         77,204       95.1       3,956         46,977       52.7       42,247         85,368       52.0       78,660         275,768       95.2       13,959         214,638       99.6       806         186,656       88.5	Number         Percent         Number         Percent           80,692         95.4         3,904         4.6           60,767         95.9         2,587         4.1           19,491         92.4         1,614         7.6           46,141         97.9         976         2.1           66,101         74.9         22,129         25.1           1,807         57.3         1,349         42.7           52,414         90.2         5,712         9.8           30,658         70.5         12,827         29.5           28,930         92.7         2,267         7.3           77,604         87.5         11,136         12.5           89,743         93.0         6,729         7.0           181,698         90.1         20,013         9.9           79,442         91.5         7,351         8.5           213,051         71.0         87,107         29.0           567,043         95.3         28,000         4.7           78,347         96.8         2,610         3.2           196,545         95.2         9,987         4.8           244,413         99.8

Only set gillnet gear is allowed prior to July 10 since 1978 season.

Table 73. Harvest of Chignik bound sockeye salmon in the Chignik, Cape Igvak, and Southeastern District Mainland areas<sup>a</sup> from 1964-93.

Year ——————	<u>Chiqn</u> Catch	<u>lik Area</u> Percent		<u>Iqvak</u> Percent		rn Distric and Area Percent	t Total
1964 <sup>b</sup>	556,890	90.57	14,980	2.44	43.021	7.00	614,891
1965	599,553	89.94	11,021	1.65	56,020	8.40	666,594
1966	219,794	87.99	18,003	7.21	12,011	4.81	249,808
1957	462,000	91.48	23,014	4.56	20,021	3.96	505,035
1968	977,382	82.53	135,951	11.48	70,959	5.99	1,184,292
1969	394,135	78.96	97,982	19.63	7,013	1.41	499,130
1970°	1,325,734	72.51	434,394	23.76	68,181	3.73	1,828,309
1971	1,016,136	80.33	197,614	15.62	51,272	4.05	1,265,022
1972	378,218	87.99	33,865	7.88	17,752	4.13	429,815

1964-72 catch and percentage figures are total for the entire season. Catch figures and percentages after 1972 are only through July 25.

1973ª	769,258	89.01	57,348	6.64	37,613	4.35	864,219
1974	530,278	73.97	122,071	17.03	64,564	9.01	716,913
1975	115,984	81.78	23,635	16.67	2,205	1.55	141,824
1976	792,024	83.08	117,926	12.37	43,356	4.55	953,306
1977	1,547,285	90.61	128,852	7.55	31,498	1.84	1,707,635
1978 <sup>e, f</sup>	1,454,389	85.38	227,014	13.33	21,952	1.29	1,703,355
1979 <sup>g</sup>	794,504	80.30	13,950	1.61	55,352	6.41	863,806
1980	670,001	91.33	32	0.00	63,570	8.67	733,603
1981	1,606,300	79.88	282,727	14.06	121,870	6.06	2,010,897
1982	1,250,768	84.46	167,401	11.30	62,767	4.24	1,480,936
1983	1,450,832	72.68	318,048	15.93	227,392	11.39	1,996,272
1984	2,474,405	73.93	449,372	13.43	423,068	12.64	3,346,845
1985 <sup>h</sup>	696,169	79.91	123,627	14.19	51,421	5.90	871,217
1986	1,456,729	82.64	188,017	10.67	118,006	6.69	1,762,752
1987	1,659,915	77.98	321,746	15.12	146,886	6.90	2,128,547
1988	678,912	95.70	11,218	1.58	19,320	2.72	709,450
1989	502,477	99.12	. 0	0.00	4,485	0.88	506,962
1990	1,211,097	83.67	107,706	7.44	128,599	8.88	1,447,402
1991 <sup>i</sup>	1,966,986	80.48	324,329	13.27	152,714	6.25	2,444,029
1992 <sup>j</sup>	1,066,732	81.25	152,358	11.60	93,845	7.15	1,312,935
1993	1,488,557	77.64	300,055	15.65	128,536	6.70	1,917,148
	_,, ,	, ,	500,055	15.05	120,550	5.70	1,511,140

The Cape Igvak and Southeastern District Mainland figures represent 80% of the total sockeye catches for those areas as it is estimated that roughly 80% of the sockeye caught in the Cape Igvak section and Southeastern District Mainland Area (excluding sockeye caught in Northwest Stepovak Section from 1964-1991 and in Orzinski bay in 1992) are destined for Chignik.

<sup>-</sup>Continued-

- The data from 1964-1972 are based on total yearly catches. Prior to 1973, Cape Igvak and Southeastern District Mainland fisheries were set by regulation to weekly fishing periods, usually 5 days per week. Time modifications were implemented when poor escapements occurred at Chignik.
- <sup>c</sup> Catches (1970-1992) were updated using historical electronic fish ticket databases.
- d During 1973 through 1977 all three fisheries were managed on a day by day basis.
- From 1978-1991, the Cape Igvak Fishery Management Plan allocated 15 percent of the total sockeye catch destined for Chignik.
- During 1978, seining prior to July 11 was disallowed in the Southeastern District Mainland. The set gillnet fishery was allowed to fish 3 days per week through July 10 after which the fishery was managed on the basis of local stocks.
- During 1979-1984 and prior to July 11, fishing was allowed 5 days per week in the Southeastern District Mainland fishery with a ceiling of an estimated 60,000 sockeye destined for Chignik. If the Chignik Area sockeye catch was 1,000,000 or more before July 11, the 60,000 ceiling was to be dropped.
- Beginning in 1985, Southeastern District Mainland fishery (excluding the Northwest Stepovak Section from 1964-1991 and Orzinski Bay statistical area) was placed on an allocation of 6.2 percent of the total estimated Chignik sockeye catch through July 25. After July 25, the Southeastern District Mainland is managed on a local stock basis. The allocation changed to 6.0 percent beginning in 1988. Seining is still not allowed prior to July 11.
- Includes overescapement of 278,305 sockeye counted past the weir during the Chignik Area seiners' boycott (June 23-July 4).
- Review of Orzinski Lake historical and current escapement records led the Alaska Board of Fisheries to redefine the Southeastern District Mainland Management Plan. Beginning in 1992, the Southeastern District Mainland fishery (excluding Orzinski Bay) was placed on an allocation of 7.0 percent of the total estimated Chignik sockeye catch through July 25.

Table 74 Sockeye harvests in the Chignik Management Area and 80 percent of the harvest in the Cape Igvak and Southeastern District Mainland areas, 1964-93.<sup>a</sup>

	Har	vest To J	uly 25 Onl	-У	Harv	Harvest For Entire Season				
		Cape Southeastern			Cape Southeastern					
Year	Chignik	Igvak	Mainland	Total	Chignik	Igvak	Mainland	Total		
1964	_	_	_	-	556,890	14,980	43,021	614,89		
1965	-	~	_	-	599,553	11,021	56,020	666,59		
1966	_	_	_	_	219,794	18,003	12,011	249,80		
1967	-	_	-	-	462,000	23,014	20,021	505,03		
1968	-	-	_	-	977,382	135,951	70,959	1,184,29		
1969	=	-	_	_	394,135	97,982	7,013	499,13		
1970	-	-	-	-	1,325,734	434,394	68,181	1,828,30		
1971	-	_	-	_	1,016,136	197,614	51,272	1,265,02		
1972	-	-	=	=	378,218	33,865	17,752	429,83		
1973	769,258	57,348	37,613	864,219	870,354	57,348	38,266	965,96		
1974	530,278	122,071	64,564	716,913	662,905	122,071	65,514	850,49		
1975	115,984	23,635	2,205	141,824	399,593	23,635	2,205	425,43		
1976	792,024	117,926	43,356	953,306	1,163,728	117,978	44,781	1,326,48		
1977	1,547,285	128,852	31,498	1,707,635	1,972,207	128,852	35,401	2,136,46		
1978	1,454,389	227,014	21,952	1,703,355	1,576,283	227,052	23,990	1,825,32		
1979	794,504	13,950	55,352	863,806	1,049,497	20,436	82,153	1,152,08		
1980	670,001	32	63,570	733,603	859,966	631	88,046	948,64		
1981	1,606,300	282,727	121,870	2,010,897	1,839,469	284,211	166,034	2,289,71		
1982	1,250,768	167,401	62,767	1,480,936	1,521,686	168,295	86,849	1,776,83		
1983	1,450,832	318,048	227,392	1,996,272	1,824,175	323,004	297,429	2,444,60		
1984	2,474,405	449,372	423,068	3,346,845	2,660,619	450,066	487,938	3,598,62		
1985	696,169	123,627	51,421	871,217	922,151	125,134	93,206	1,140,49		
1986	1,456,729	188,017	118,006	1,762,752	1,645,834	188,129	147,056	1,981,03		
1987	1,659,915	321,746	146,886	2,128,547	1,898,838	344,357	188,983	2,432,1		
1988	678,912	11,218	19,320	709,450	795,841	28,783	79,101	903,72		
1989	502,477	-	4,485	506,962	1,159,287	_	138,594	1,297,88		
1990	1,211,097	107,706	128,599	1,447,402	2,093,650	133,821	216,944	2,444,43		
1991 <sup>b</sup>	1,966,986	324,329	152,714	2,444,029	2,173,970	341,869	228,934	2,744,77		
1992	1,066,732	152,358	93,845	1,312,935	1,277,449	156,318	177,713	1,611,48		
1993	1,488,557	300,055	128,536	1,917,148	1,697,351	329,905	222,591	2,249,8		

Catches (1970-1992) were updated using historical electronic fish ticket databases.
 Includes overescapement of 278,305 sockeye counted past the weir during the Chignik Area Seiners' boycott (June 23 - July 4).

Table 75. Southeastern District Mainland fishery, annual CFEC permits and number of landings by gear type, 1970-93.

	Purs	e Seine	Set G	illnet	То	tal
Year	Permits	Landings	Permits	Landings	Permits .	Landings
1970	35	127	17	273	46	411
1971	41	216	15	269	48	485
1972	24	43	15	167	34	210
1973	13	22	16	167	24	189
1974	20	100	31	262	42	362
1975	6	11	7	14	13	25
1976	44	167	19	174	62	341
1977	34	136	21	190	54	326
1978	45	196	23	235	68	431
1979	49	247	33	437	82	684
1980	40	143	31	598	69	741
1981	50	365	35	923	87	1,288
1982	48	343	41	1,167	89	1,510
1983	49	260	43	1,259	92	1,519
1984	55	292	57	2,171	112	2,463
1985	42	245	49	864	91	1,109
1986	42	150	47	927	89	1,077
1987	49	160	55	942	104	1,102
1988	55	254	49	784	104	1,038
1989	75	428	48	832	123	1,260
1990	74	228	58	683	132	911
1991	70	348	63	1,352	133	1,700
1992	59	178	60	1,267	119	1,445
1993	62	363	65	1,401	127	1,764
1984-93	Average					
	58	265	55	1,122	113	1,387
1970-93	Average		_			
	45	209	37	723	81	933

Table 76. Southeastern District Mainland sockeye salmon catch, by gear<sup>a</sup>, for the entire season, 1970-93.

		Catch by Gear					
	Set	. Net	Purse	Seine	_		
Year	Number	Percent	Number	Percent	Total Catch		
1970	81,259	95.1	4,158	4.9	85,417		
1971	61,037	95.1	3,141	4.9	64,178		
1972	19,957	89.9	2,233	10.1	22,190		
1973	46,586	97.2	1,346	2.8	47,932		
1974	66,200	74.0	23,219	26.0	89,419		
1975	1,807	57.3	1,349	42.7	3,156		
1976	54,190	90.4	5,725	9.6	59,915		
1977	35,410	73.1	13,053	26.9	48,463		
1978	30,229	87.1	4,462	12.9	34,691		
1979	89,863	71.2	36,270	28.8	126,133		
1980	115,978	89.0	14,344	11.0	130,322		
1981	226,820	87.4	32,719	12.6	259,539		
1982	109,867	93.1	8,165	6.9	118,032		
1983	284,735	72.2	109,489	27.8	394,224		
1984	617,011	90.7	63,634	9.3	680,645		
1985	119,672	86.8	18,219	13.2	137,891		
1986	224,333	91.4	21,178	8.6	245,511		
1987	290,042	96.9	9,421	3.1	299,463		
1988	125,509	79.2	32,865	20.8	158,374		
1989	151,745	53.8	130,549	46.2	282,294		
1990	158,065	57.0	119,395	43.0	277,460		
1991	336,238	84.8	60,417	15.2	396,655		
1992	283,927	86.8	43,267	13.2	327,194		
1993	271,750	82.1	59,265	17.9	331,015		
Averages	· · ·						
1970-93	158,426	82.3	34,078	17.7	192,505		
1978-93	214,737	81.8	47,729	18.2	262,465		

<sup>&</sup>lt;sup>a</sup> Set gillnet gear only prior to July 10 since 1978 season.

Table 77. Estimated Orzinski sockeye salmon runs and total Southeastern District Mainland sockeye salmon harvest, in numbers of salmon, 1935-93.

Year	Escapement	Orzinski and American Bay Catch	Balance of Suzy Creek Dent Point Catch	Total Suzy Creek Dent Point Catch	Total Orzinski Run	Total Southeastern Mainland Catch
1935 <b>*</b>	28,474					
1936*	31,720					
1937	15,393					
1938 <sup>a,b</sup>	8,675					
1939*	10,414					
1940*	16,414					
1941ª	8,241					
1981	18,000°	19,385	32,612	51,997	69,997 <sup>t</sup>	259,539
1982	9,000°	6,079	3,392	9,471	18,471 <sup>f</sup>	118,032
1983	21,300°	10,814	11,624	22,438	43,738 <sup>f</sup>	394,224
1984	18,600°	18,603	52,119	70,722	89,322 <sup>f</sup>	680,645
1985	14,000°	5,061	16,322	21,383	35,383 <sup>f</sup>	137,891
1986	10,300°	12,455	49,236	61,691	71,991 <sup>f</sup>	245,511
1987	11,400°	14,463	48,771	63,234	74,634 <sup>f</sup>	299,463
1988	19,300°	14,462	45,036	59,498	78,798 <sup>f</sup>	158,374
1989	16,700°	18,476	90,576	109,052	125,752 <sup>f</sup>	282,294
1990	15,000 <sup>d</sup>	1,257	5,023	6,280	21,280 <sup>f</sup>	277,460
1991	40,000 <sup>d</sup>	50,496	59,991	110,487	150,487 <sup>f</sup>	396,655
1992	25,000 <sup>d</sup>	105,050°	23,539	128,589	130,050 <sup>9</sup>	327,194
1993	24,717 <sup>d</sup>	52,776*	37,894	90,670	77,493 <sup>9</sup>	331,015

<sup>&</sup>lt;sup>a</sup> Weir was used to count escapement.

b In 1938, adverse weather conditions may have caused only part of the run to be counted.

<sup>&</sup>lt;sup>c</sup> Escapement counts are indexed total escapements and are likely lower than the actual total.

d Escapement count is the sum of weir counts plus aerial surveys conducted after the weir was removed.

<sup>&</sup>lt;sup>e</sup> Catch number is for Orzinski Bay only.

f The total Orzinski run is escapement plus total Suzy Creek to Dent Point catch.

g The total Orzinski run is escapement plus Orzinski Bay catch.

Table 78. Orzinski Bay salmon harvest, all gears combined, season total by day, 1993.

Cat	ch_					Numbe	r of Sal	mon	
Month	Day	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
July	3	26	27	2	3,821	2	2	5	3,832
-	4	28	35	2	4,176	0	2	9	4,189
	5	25	37	1	5,762	1	10	10	5,784
	6	22	32	2	6,896	0	. 0	0	6,898
	7	17	17	0	4,138	0	4	0	4,132
	8	17	23	0	4,372	0	7	1	4,377
	9	12	16	3	2,435	1	0	14	2,460
	10	20	33	2	5,498	0	3	1	5,501
	11	13	17	0	2,665	0	2	2	2,670
	12	15	17	0	2,748	0	36	2	2,752
	14	5	4	0	1,100	0	59	23	1,159
	15	16	18	4	2,215	0	35	13	2,291
	16	13	13	0	1,885	1	110	6	1,927
	21	*	*	*	*	*	*	*	*
	22	*	*	*	*	*	*	*	*
	23	11	12	1	1,763	32	956	48	2,800
	24	*	*	*	*	*	*	*	*
	26	*	*	*	*	*	*	*	*
	27	*	*	*	*	*	*	*	*
_	28	*	*	*	*	*	*	*	*
Aug	1	*	*	*	*	*	*	*	*
	2	*	*	*	*	*	*	*	*
	3	*	*	*	*	*	*	*	*
	6	*	*	*	*	*	*	*	*
	8	*	*	*	*	*	*	*	*
Throug	th Ju	ıly 25							
	,	34	306	17	50,257	37	1,400	142	51,853
Total		34	318	17	52,776	112	8,400	320	61,625

<sup>\*</sup> Confidentiality requirements prohibit reporting harvest by day.

Table 79. Sockeye salmon daily and cumulative escapement counts through the Orzinski Lake weir, 1993.

			Daily			umulati	ve	Daily Per	cent	Cumulat	ive Per	cent
Date		Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
June 8	3-17	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
	18	1	0	1	1	0	1	0.0	0.0	0.0	0.0	0.0
	19	0	0	0	1	0	1	0.0	0.0	0.0	0.0	0.0
	20	0	0	0	1	0	1	0.0	0.0	0.0	0.0	0.0
	21	0	0	0	1	0	1	0.0	0.0	0.0	0.0	0.0
	22	0	0	0	1	0	1	0.0	0.0	0.0	0.0	0.0
	23	362	4	366	363	4	367	1.5	0.0	1.5	0.0	1.5
	24	5	0	5	368	4	372	0.0	0.0	1.5	0.0	1.5
	25	34	1	35	402	5	407	0.1	0.0	1.6	0.0	1.6
	26	456	18	474	858	23	881	1.8	0.1	3.5	0.1	3.6
	27	460	14	474	1,318	37	1,355	1.9	0.1	5.3	0.1	5.5
	28	170	14	184	1,488	51	1,539	0.7	0.1	6.0	0.2	6.2 7.3
	29	204	12 0	216 0	1,692	63 63	1,755 1,755	0.8	0.0	6.8 6.8	0.3	7.5
July	30 1	0 2,805	104	2,909	1,692 4,497	167	4,664	11.3	0.4	18.2	0.7	18.9
oury	2	1,302	78	1,380	5,799	245	6,044	5.3	0.4	23.5	1.0	24.5
	3	1,302	75	1,394	7,118	320	7,438	5.3	0.3	28.8	1.3	30.3
	4	565	121	686	7,683	441	8,124	2.3	0.5	31.1	1.8	32.9
	5	0	0	0	7,683	441	8,124	0.0	0.0	31.1	1.8	32.9
	6	Õ	ő	ŏ	7,683	441	8,124	0.0	0.0	31.1	1.8	32.5
	7	71	24	95	7,754	465	8,219	0.3	0.1	31.4	1.9	33.3
	8	0	0	0	7,754	465	8,219	0.0	0.0	31.4	1.9	33.3
	9	277	161	438	8,031	626	8,657	1.1	0.7	32.5	2.5	35.0
	10	0	0	0	8,031	626	8,657	0.0	0.0	32.5	2.5	35.0
	11	415	88	503	8,446	714	9,160	1.7	0.4	34.2	2.9	37.2
	12	4	1	5	8,450	715	9,165	0.0	0.0	34.2	2.9	37.1
	13	1,709	125	1,834	10,159	840	10,999	6.9	0.5	41.1	3.4	44.5
	14	239	47	286	10,398	887	11,285	1.0	0.2	42.1	3.6	45.
	15	178	20	198	10,576	907	11,483	0.7	0.1	42.8	3.7	46.5
	16	75	50	125	10,651	957	11,608	0.3	0.2	43.1	3.9	47.0
	17	208	68	276	10,859	1,025	11,884	0.8	0.3	43.9	4.1	48.3
	18	2,043	315	2,358	12,902	1,340	14,242	8.3	1.3	52.2	5.4	57.6
	19	1,084	140	1,224	13,986	1,480	15,466	4.4	0.6	56.6	6.0	62.6
	20	776	57	833	14,762	1,537	16,299	3.1	0.2	59.7	6.2	65.9
	21	886	141 67	1,027	15,648	1,678	17,326	3.6 1.0	0.6 0.3	63.3 64.3	6.8 7.1	70.1 71.4
	22 23	249 42	5 / 5 6	316 98	15,897 15,939	1,745 1,801	17,642 17,740	0.2	0.3	64.5	7.3	71.8
	24	538	268	806	16,477	2,069	18,546	2.2	1.1	66.7	8.4	85.0
	25	896	335	1,231	17,373	2,404	19,777	3.6	1.4	70.3	9.7	80.0
	26	0	333	1,231	17,373	2,404	19,777	0.0	0.0	70.3	9.7	80.0
	27	30	23	53	17,403	2,427	19,830	0.1	0.1	70.4	9.8	80.2
	28	204	67	271	17,607	2,494	20,101	0.8	0.3	71.2	10.1	81.3
	29	581	152	733	18,188	2,646	20,834	2.4	0.6	73.6	10.7	84.3
	30	11	32	143	18,299	2,678	20,977	0.4	0.1	74.0	10.8	84.9
	31	160	111	271	18,459	2,789	21,248	0.6	0.4	74.7	11.3	86.0
Auq	1	286	307	593	18,745	3,096	21,841	1.2	1.2	75.8	12.5	88.4
	2	217	229	446	18,745	3,325	22,287	0.9	0.9	76.7	13.5	90.3
Post A					• -		-					
	-	1,538	892	2,430	20,500	4,217	24,717	6.2	3.6	82.9	17.1	100.0
Total		20,500	4,217	24,217	20,500	4,217	24,717	82.9	17.1	82.9	17.1	100.0

August 2 count was estimated from morning fish counts. The weir was closed for the season on August 2.

Table 80. Pink salmon daily and cumulative escapement counts through the Orzinski Lake weir, 1993.

		<u>F</u>	ink	Daily	Cumulative	
Date		Daily	Cumulative	Percent Adults	Percent Adults	
June	8 - 30	0	0	0.0	0.0	
July	1 - 8	0	0	0.0	0.0	
	9	1	1	0.2	0.2	
	10	0	1	0.0	0.2	
	11	0	1	0.0	0.2	
	12	0	1	0.0	0.2	
	13	2	3	0.6	0.8	
	14	1	4	0.2	1.0	
	15	7	11	2.0	3.0	
	16	1	12	0.2	3.2	
	17	0	12	0.0	3.2	
	18	18	30	5.1	8.3	
	19	2	32	0.6	8.9	
	20	0	32	0.0	8.9	
	21	6	38	1.7	10.6	
	22	25	63	7.1	17.7	
	23	4	67	1.1	18.8	
	24	4	71	1.1	19.9	
	25	17	88	4.8	24.7	
	26	3	91	0.9	25.6	
	27	7	98	2.0	27.6	
	28	110	208	31.3	58.9	
	29	3	211	0.9	59.8	
	30	13	224	3.7	63.5	
August	1	101	325	28.7	92.2	
	2	27	352	7.7	100.0	
Total		352	352	100.0	100.0	

The weir was closed for the season on August 2.

Table 81. Southeastern District Mainland fishery, excluding Orzinski Bay, estimated sockeye interception of Chignik destined salmon, 1993.

				· · · · · · · · · · · · · · · · · · ·	
Date		Total Catch	Chignik Contribution	Cumulative Chignik Catch	Percent of Total
June	12	4,435	3,548	3,548	1.6
	13 15	3,079 8,560	2,463 6,848	6,011 12,859	1.1 3.1
	16	15,945	12,756	25,615	5.7
	17	2,277	1,822	27,437	0.8
	26	21,461	17,169	44,606	7.7
	27	13,691	10,953	55,558	4.9
July	7	1,288	1,030	56,589	0.5
	8 9	1,428 26,688	1,142 21,350	57,731 79,082	0.5 9.6
	14	40,842	32,674	111,755	14.7
	20	60	48	111,803	0.0
	21	520	416	112,219	0.2
	22	1,610	1,288	113,507	0.6
	24	18,786	15,029	128,536	6.8
	26	14,607	11,686	140,222	5.3 6.1
	27 28	16,834 11,823	13,467 9,458	153,689 163,147	4.3
Aug	1	10,501	8,401	171,548	3.8
5	2	10,522	8,418	179,966	3.8
	3	9,669	7,735	187,701	3.5
	6	4,596	3,677	191,378	1.7
	7 8	8,715 5,556	6,972 4,445	198,350 202,794	3.1 2.0
	11	3,560	2,848	205,642	1.3
	12	3,481	2,785	208,427	1.3
	13	750	600	209,027	0.3
	16	1,089	871	209,898	0.4
	17	1,324	1,059	210,958	0.5
	18 19	1,504 885	1,203 708	212,161 212,869	0.5 0.3
	20	294	235	213,104	0.1
	21	24	19	213,123	0.0
	22	0	0	213,123	0.0
	23	142	114	213,237	0.1
	24	56 151	45	213,282	0.0
	25 26	151 412	121 330	213,402 213,732	0.1 0.1
Sept	1	775	620	214,352	0.3
-	2	3,568	2,854	217,206	1.3
	3	3,227	2,582	219,788	1.2
	6	294	235	220,023	0.1
	7 8	1,199 220	959 176	220,982 221,158	0.4 0.1
	9	18	14	221,138	0.0
	13	184	147	221,320	0.1
	14	345	276	221,596	0.1
	15	479	383	221,979	0.2
	16	83	66	222,046	0.0

Table 81. (page 2 of 2)

Date		Total Catch	Chignik Contribution	Cumulative Chignik Catch	Percent of Total
Sept	17	129	103	222,149	0.0
	24	269	215	222,364	0.1
	29	52	42	222,406	0.0
	30	162	130	222,535	0.1
Oct	1	40	32	222,567	0.0
	6	30	24	222,591	0.0
Total		278,239	222,591	222,591	100.0

Set gillnet gear only is allowed prior to July 11.

The Chignik contribution assumes 80% of the sockeye catch through the entire season in the Southeastern District Mainland fishery, exclusive of Orzinski Bay, is destined for Chignik.

Catch through July 25, was 128,536 salmon (57.8%) of the season total Chignik destined sockeye salmon harvest.

Table 82. Southeastern District Mainland fishery, excluding Orzinski Bay, estimated sockeye salmon interception of Chignik destined salmon for the entire season, 1970-93.

		Catch	by Gear		•
	Set	Net	Purse	Seine	
Year	Number	Percent	Number	Percent	Total Catch
1970	64,920	95.2	3,261	4.8	68,181
1971	48,759	95.1	2,513	4.9	51,272
1972	15,966	89.9	1,786	10.1	17,752
1973	37,226	97.3	1,039	2.7	38,266
1974	52,877	80.7	12,638	19.3	65,514
1975	1,126	51.1	1,079	48.9	2,205
1976	41,820	93.4	2,961	6.6	44,781
1977	27,646	78.1	7,754	21.9	35,401
1978	21,140	88.1	2,850	11.9	23,990
1979	59,188	72.0	22,965	28.0	82,153
1980	77,500	88.0	10,546	12.0	88,046
1981	140,857	84.8	25,177	15.2	166,034
1982	81,391	93.7	5,458	6.3	86,849
1983	211,001	70.9	86,428	29.1	297,429
1984	441,758	90.5	46,181	9.5	487,938
1985	79,521	85.3	13,686	14.7	93,206
1986	130,744	88.9	16,312	11.1	147,056
1987	181,589	96.1	7,394	3.9	188,983
1988	53,166	67.2	25,935	32.8	79,101
1989	76,599	55.3	61,994	44.7	138,594
1990	121,534	56.0	95,410	44.0	216,944
1991	193,010	84.3	35,924	15.7	228,934
1992	143,466	80.7	34,250	19.3	177,716
1993	175,201	78.7	47,390	21.3	222,591
Averages	<del></del>				
1970-93	103,250	81.3	23,789	18.7	127,039
1978-93	136,729	80.3	33,619	19.7	170,348

From 1970-91, the Chignik contribution is 80% of the sockeye salmon harvested in Beaver Bay, Balboa Bay, Southwest Stepovak, Stepovak Flats and East Stepovak Sections.

From 1992-93, the Chignik contribution is 80% of the sockeye salmon harvested in the Southeastern District Mainland fishery except Orzinski Bay where 100% of the sockeye salmon are considered local production.

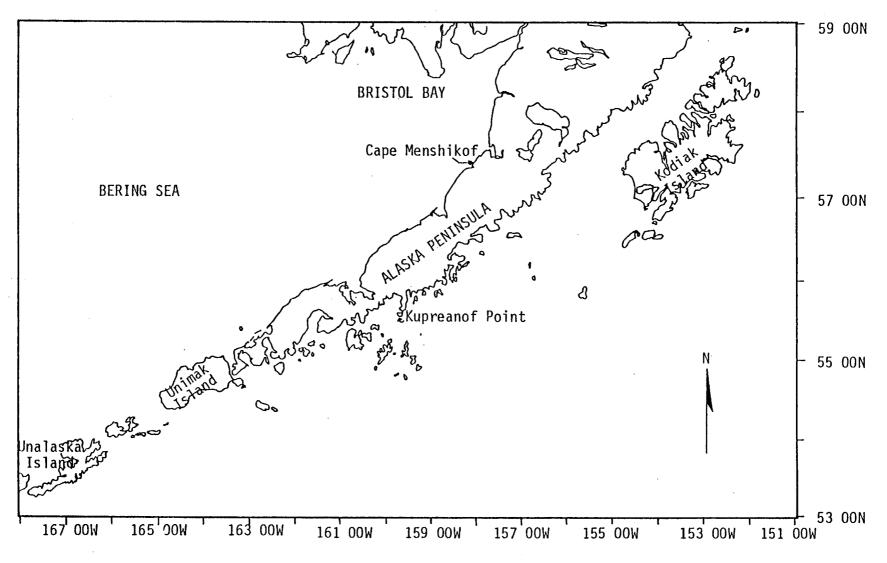


Figure 1. Map of the Alaska Peninsula and Aleutian Islands Areas; the study area on the Pacific portion of the map is from Kupreanof Point to Unalaska Island and on the Bering Sea from Unalaska Island to Cape Menshikof.

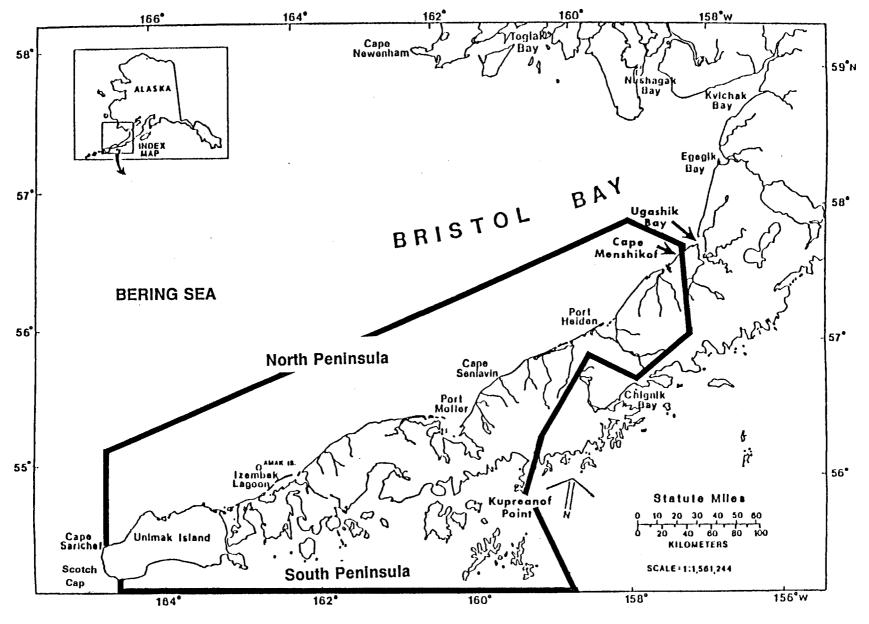


Figure 2. Map of the Alaska Peninsula Management Area, with the North and South Peninsula defined.

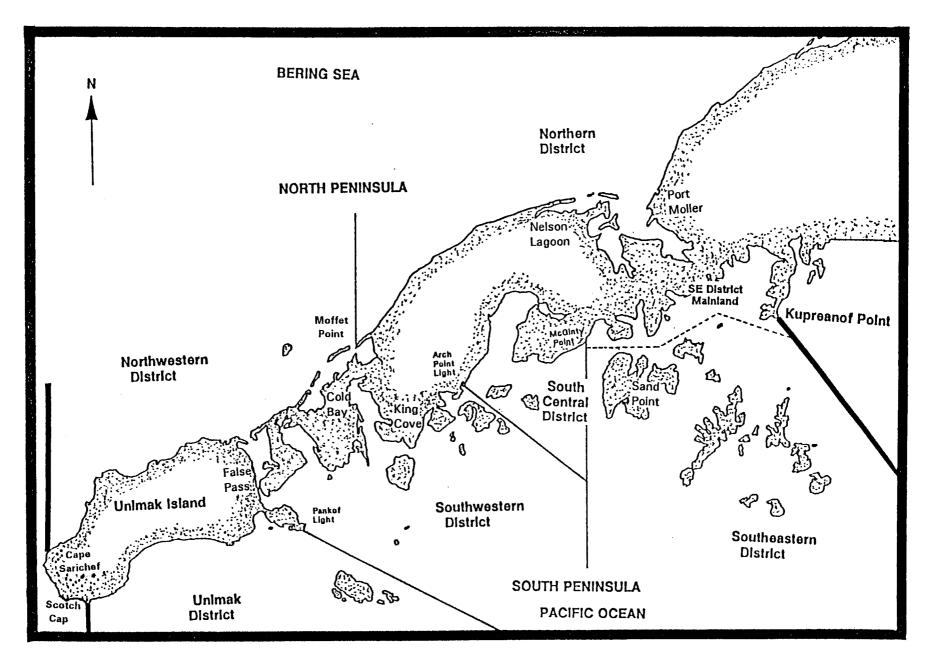


Figure 3. Map of the Alaska Peninsula Management Area with the salmon fishing districts defined.

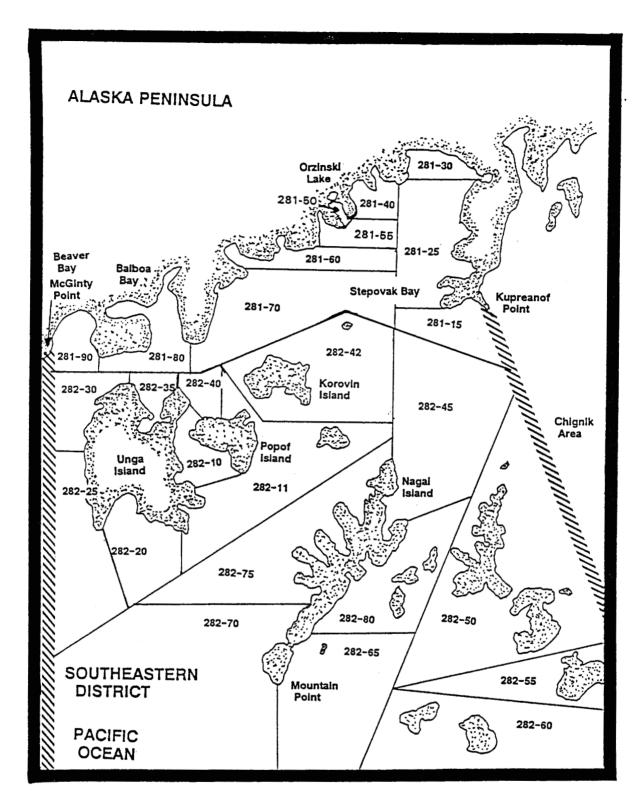


Figure 4. Map of the Alaska Peninsula Area from Kupreanof Point to McGinty Point (Southeastern District) with the statistical salmon fishing areas shown.

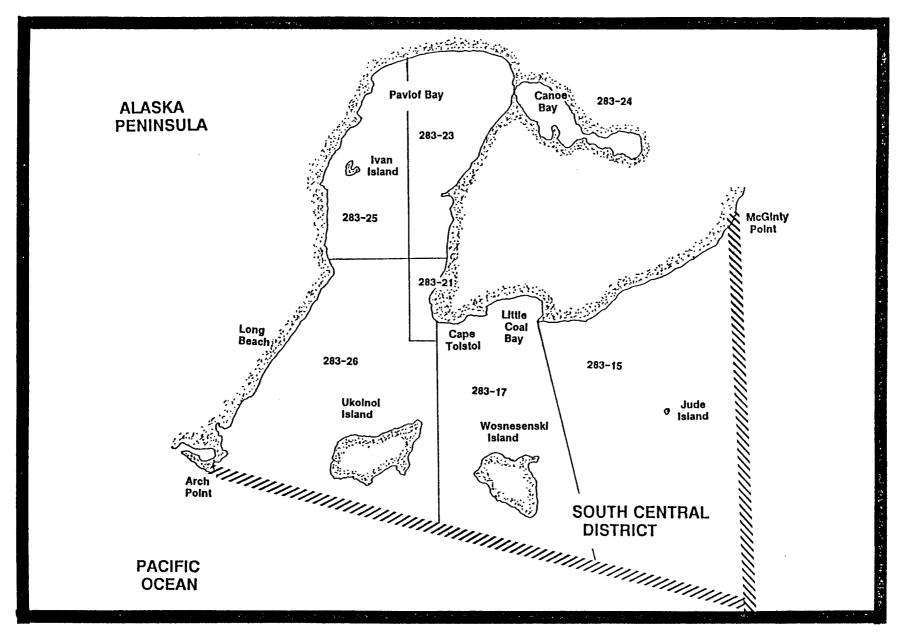


Figure 5. Map of the Alaska Peninsula Area from McGinty Point to Arch Point (South Central District) with the statistical salmon fishing areas shown.

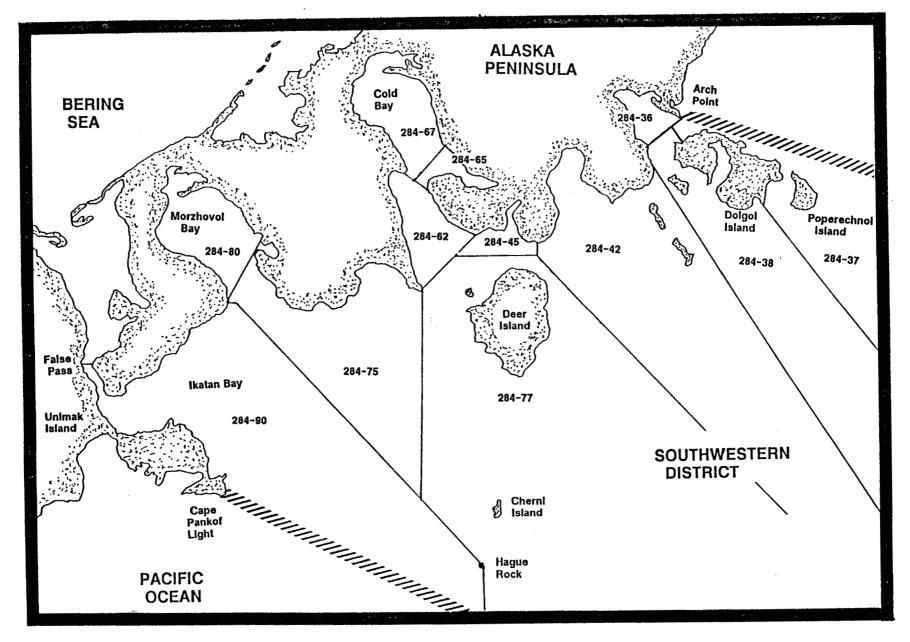


Figure 6. Map of the Alaska Peninsula Area from Arch Point to Unimak Island (Southwestern District) with the statistical salmon fishing areas shown.

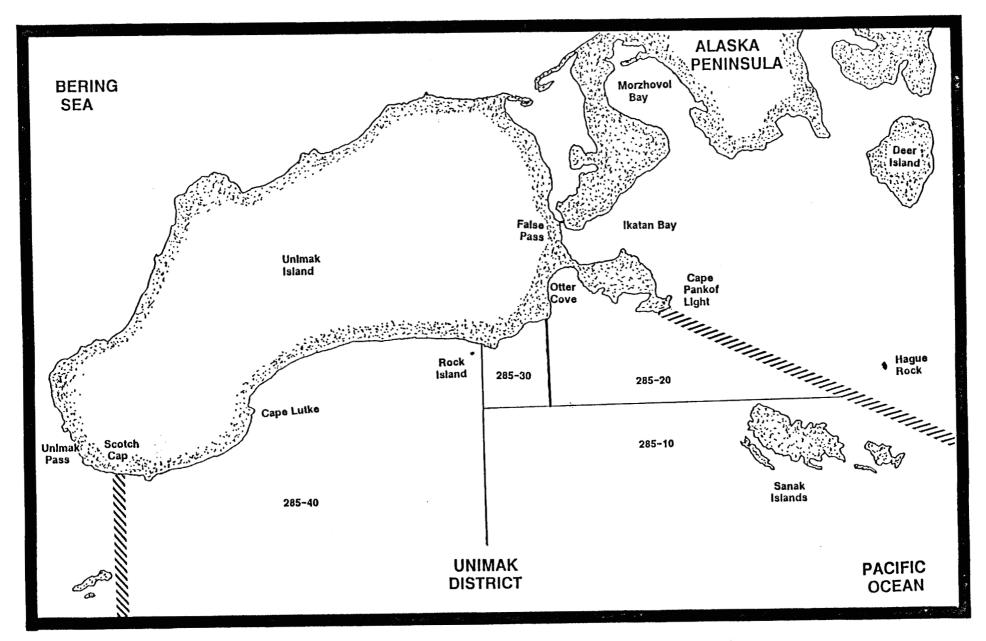
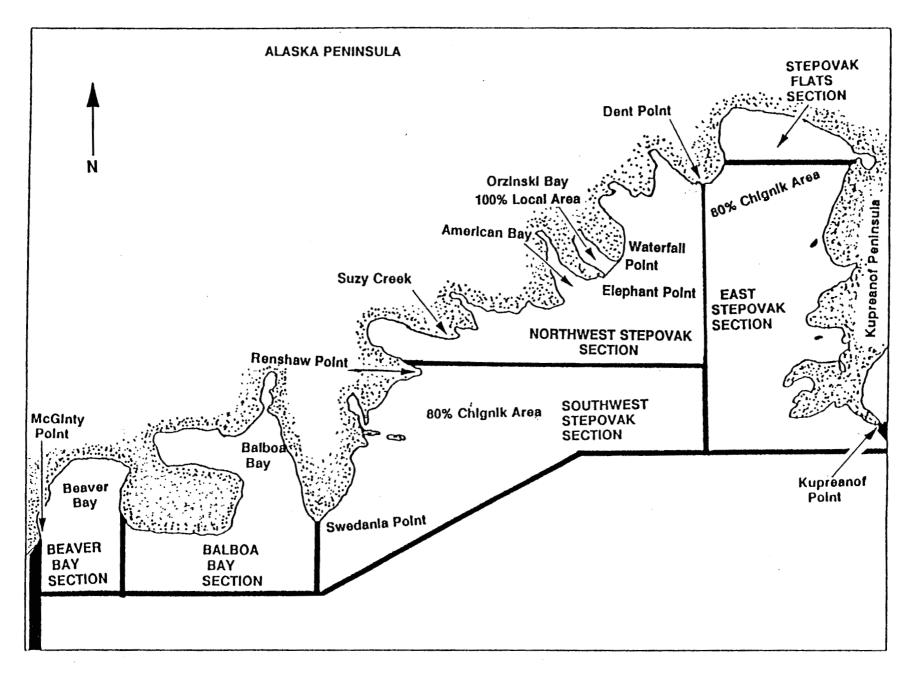
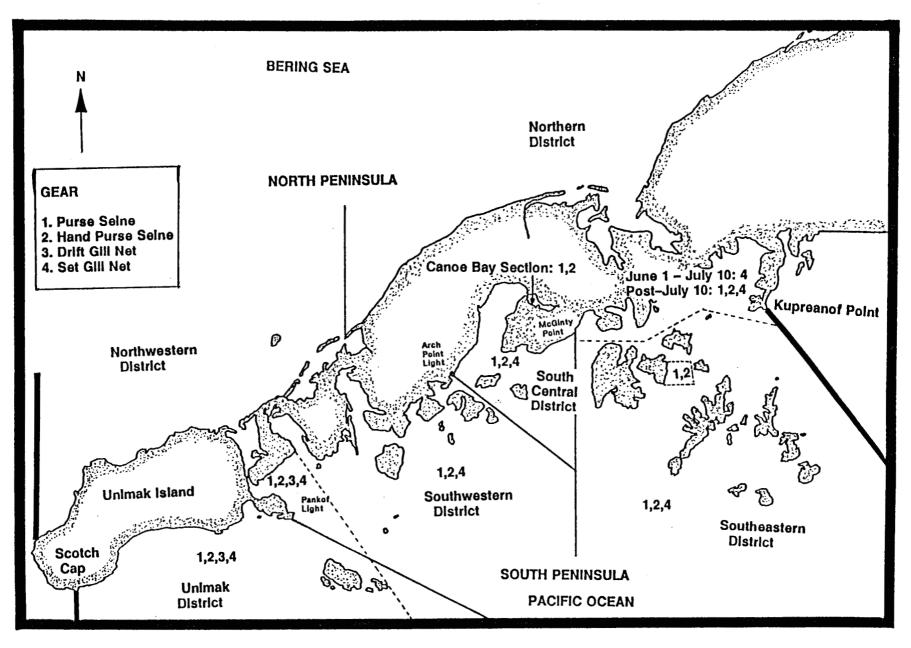


Figure 7. Map of the Alaska Peninsula Area from Hague Rock to Unimak Pass (Unimak District) with the statistical salmon fishing areas shown.

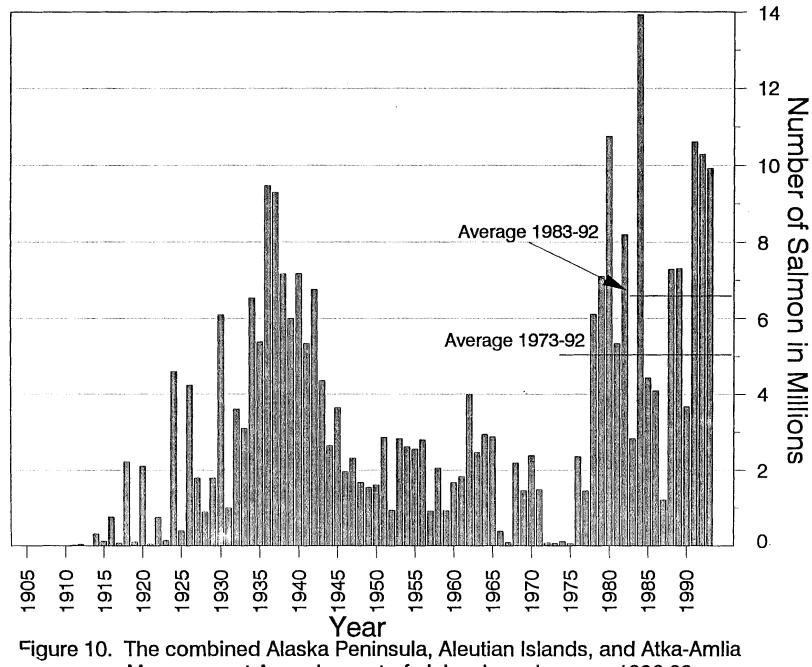


re 8. Map of the Southeastern District Mainland fishery from Kupreanof Point to McGinty Point with the salmon sections defined.



Set Gill Net gear may be used throughout the South Peninsula during periods when the seine fishery is closed by emergency order due to the presence of immature salmon.

Figure 9. Map of the Alaska Peninsula Area from Kupreanof Point to Scotch Cap with the allowable gear types shown.



Management Areas harvest of pink salmon by year, 1906-93.

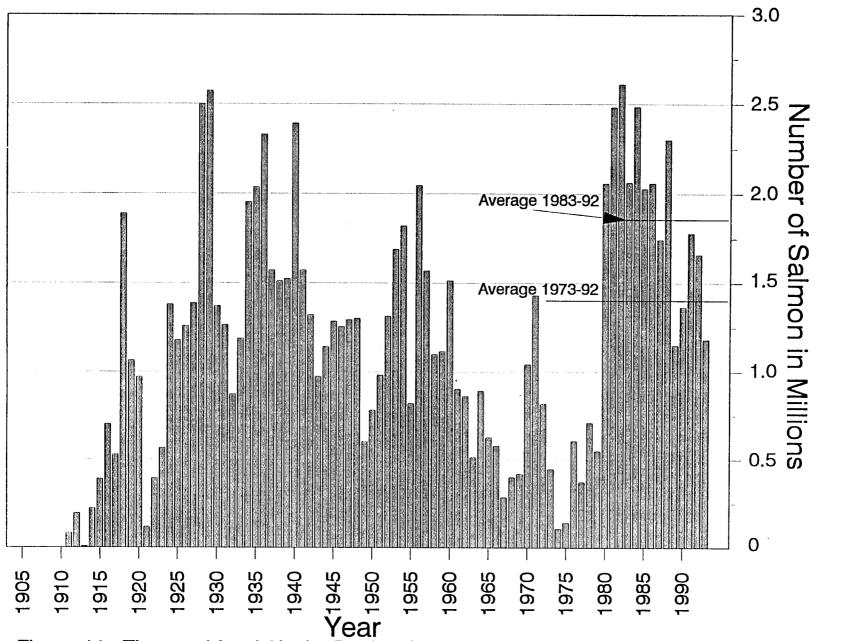


Figure 11. The combined Alaska Peninsula, Aleutian Islands, and Atka-Amlia Management Areas harvest of chum salmon by year, 1906-93.

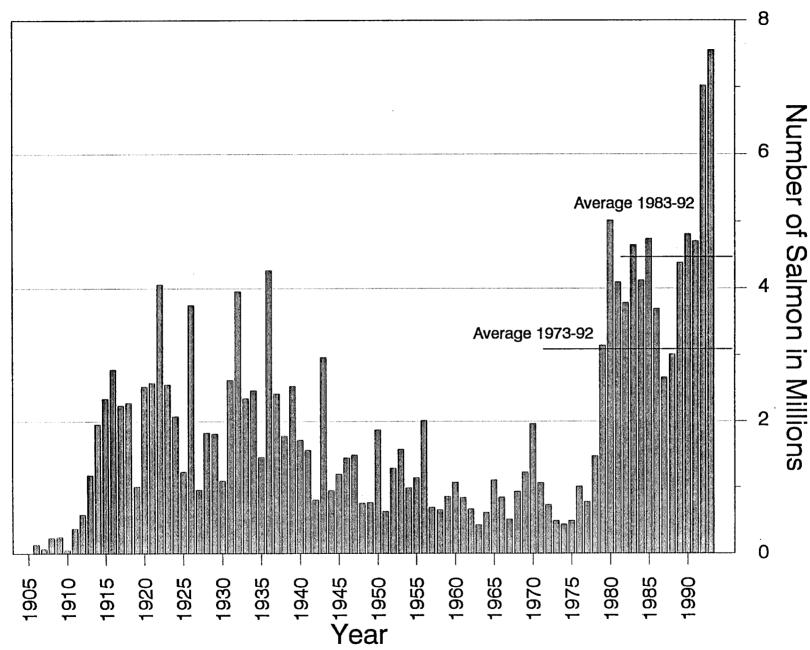


Figure 12. The combined Alaska Peninsula, Aleutian Islands, and Atka-Amlia Management Areas harvest of sockeye salmon by year, 1906-93.

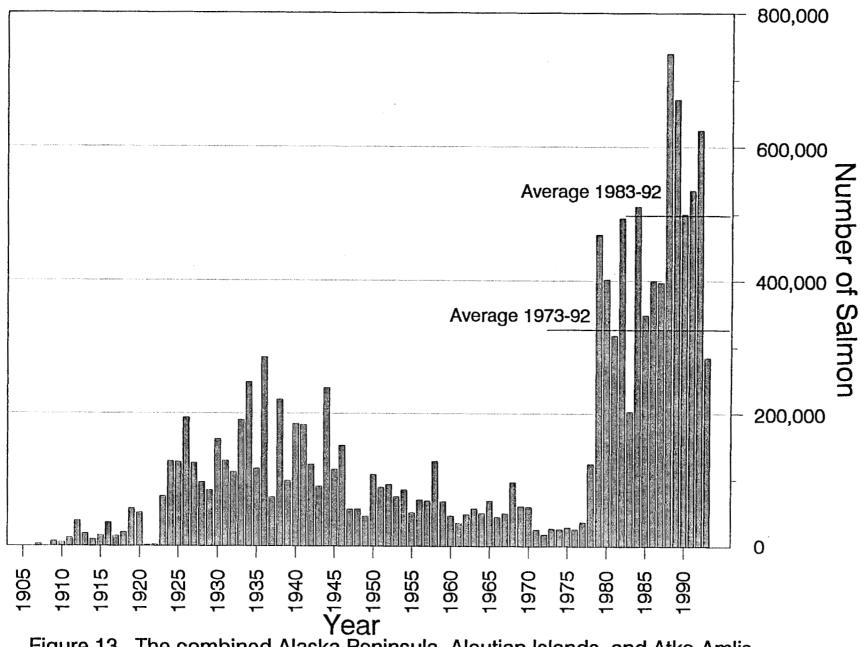


Figure 13. The combined Alaska Peninsula, Aleutian Islands, and Atka-Amlis Management Areas harvest of coho salmon by year, 1906-93.

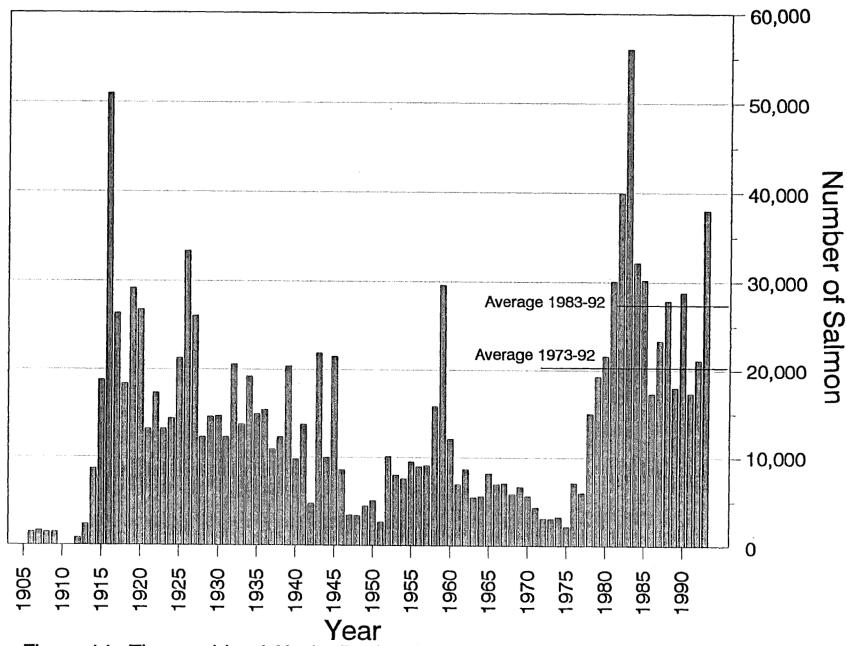


Figure 14. The combined Alaska Peninsula, Aleutian Islands, and Atka-Amlia Management Areas harvest of chinook salmon by year, 1906-93.

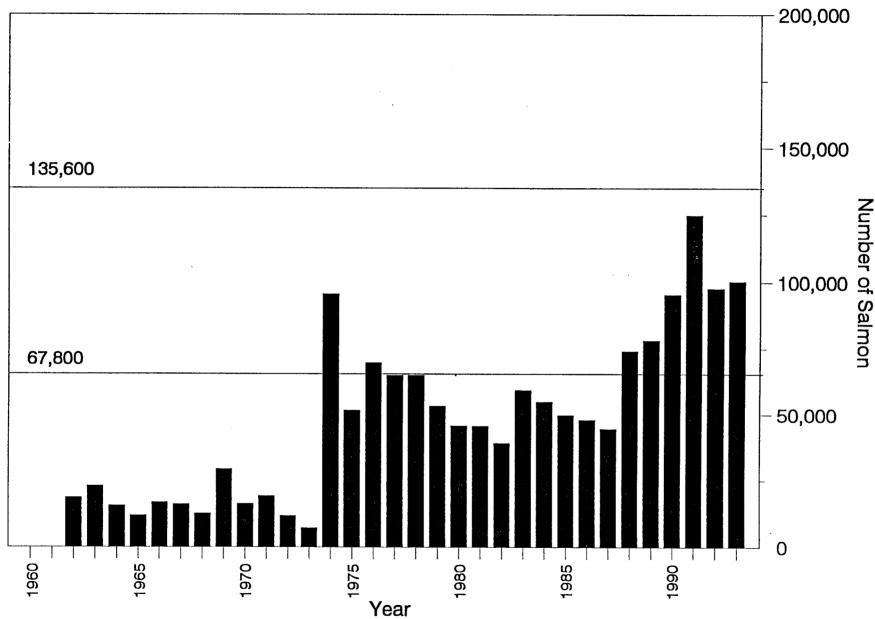


Figure 15. South Peninsula total indexed escapement of sockeye salmon by year, 1960-93.

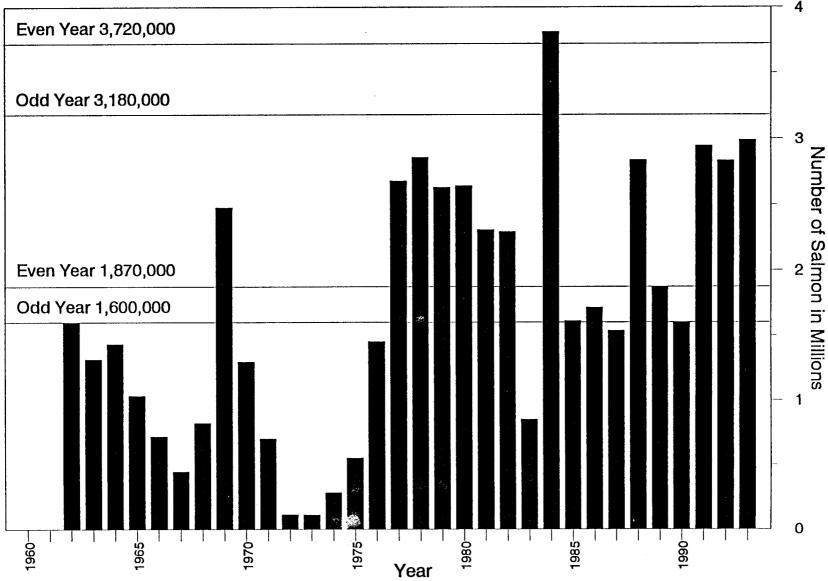


Figure 16. South Peninsula total indexed escapement of pink salmon by year, 1960-93.

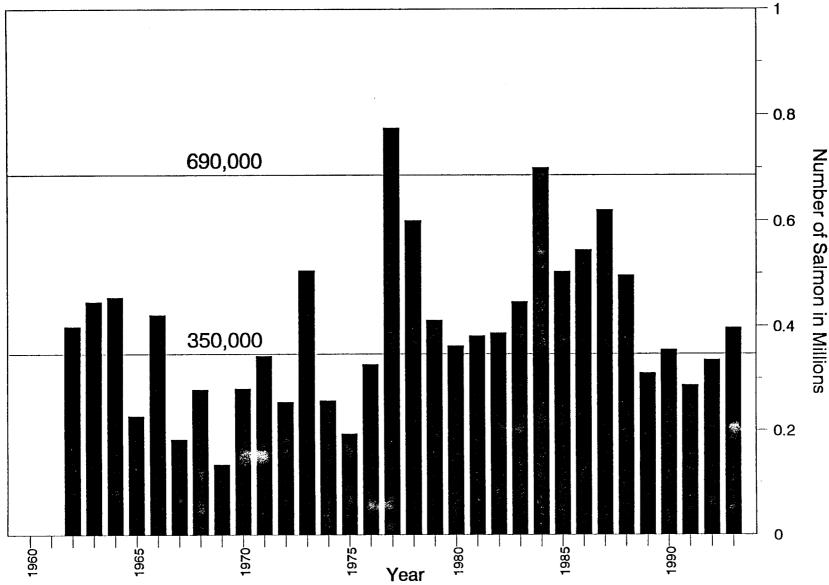


Figure 17. South Peninsula total indexed escapement of chum salmon by year, 1960-93.

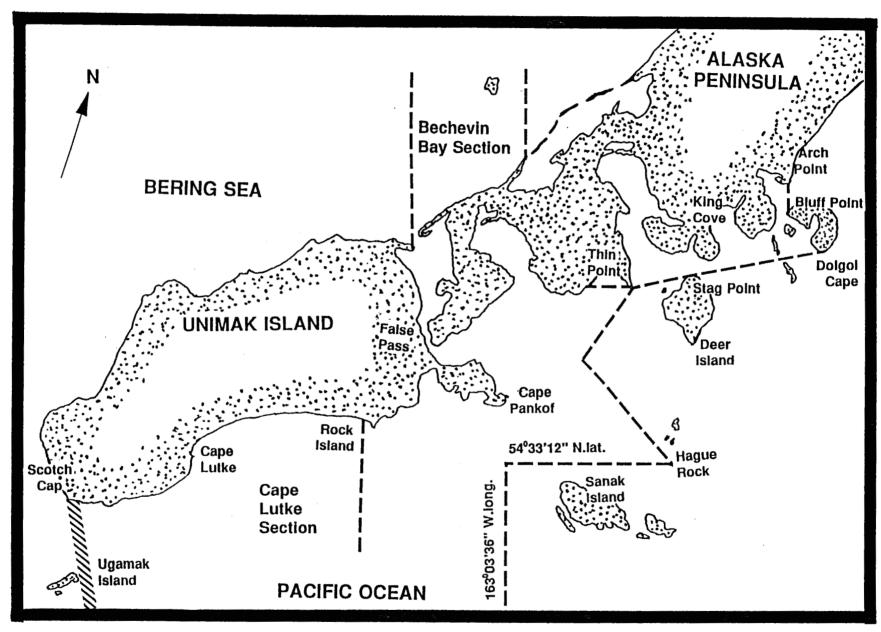


Figure 18. Map of the South Unimak June fishery.

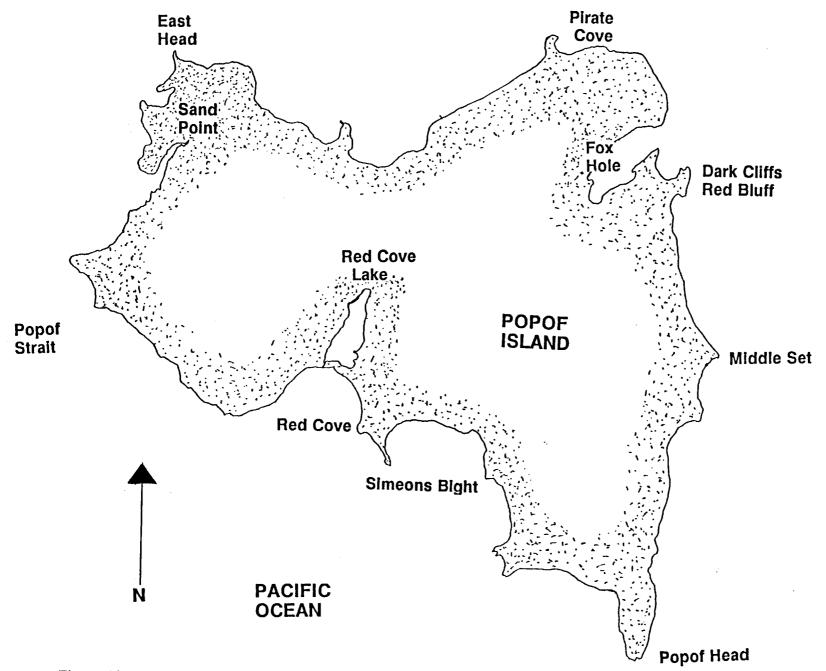


Figure 19. Map of Popof Island with the test fishing sites defined.

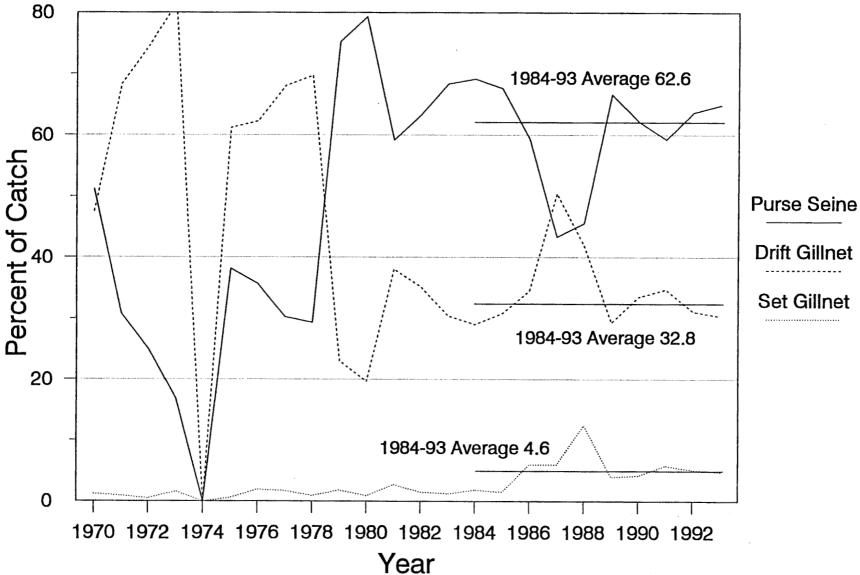


Figure 20. South Unimak and Shumagin Islands June fisheries sockeye salmon catch by gear, 1970-93.

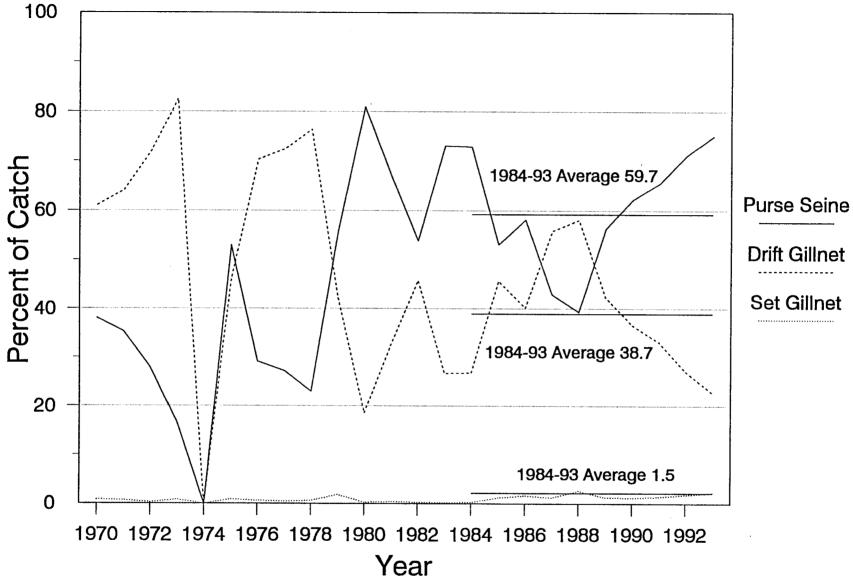


Figure 21. South Unimak and Shumagin Islands June fisheries chum salmon catch by gear, 1970-93.

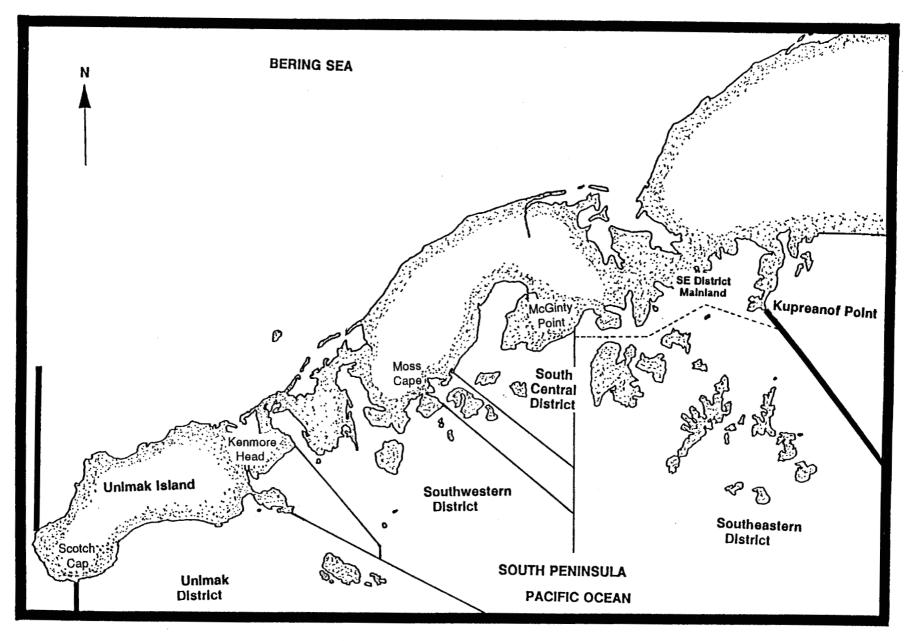


Figure 22. Map of the South Peninsula with McGinty Point, Moss Cape, Kenmore Head, and Scotch Cap shown.

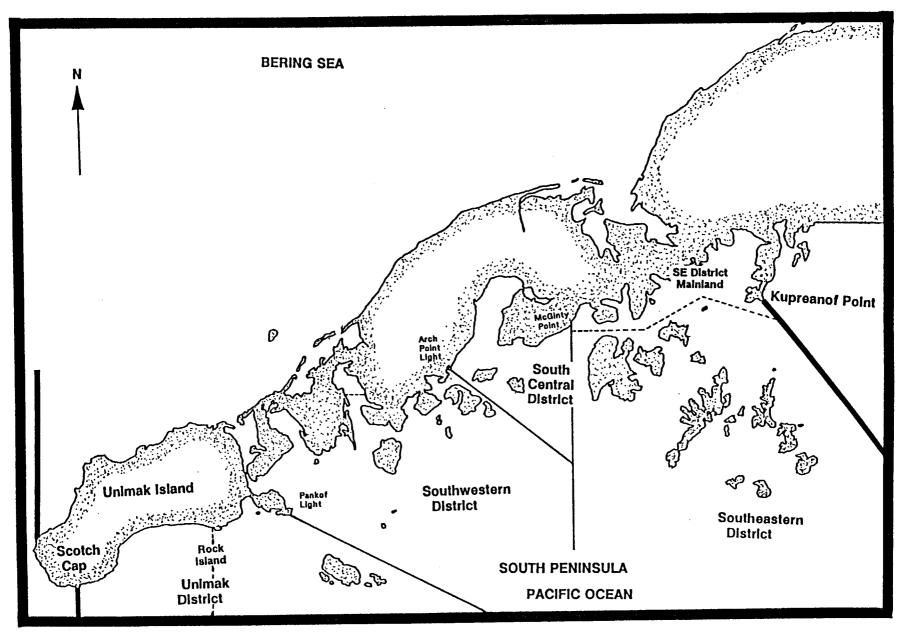


Figure 23. Map of the South Peninsula from Kupreanof Point to Scotch Cap with the general post June fishing area (Rock Island-Kupreanof Point) and the Southeastern District Mainland area shown.

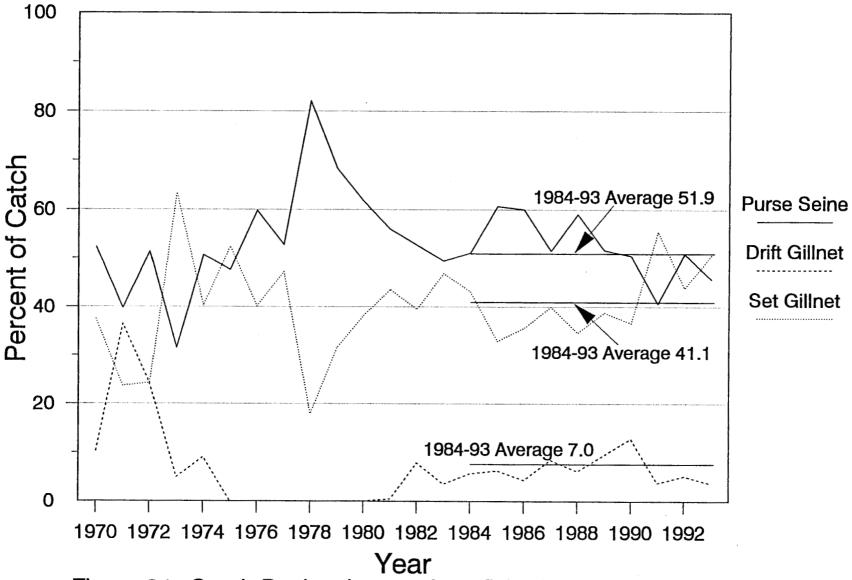


Figure 24. South Peninsula post June fisheries sockeye salmon catch by gear, 1970-93.

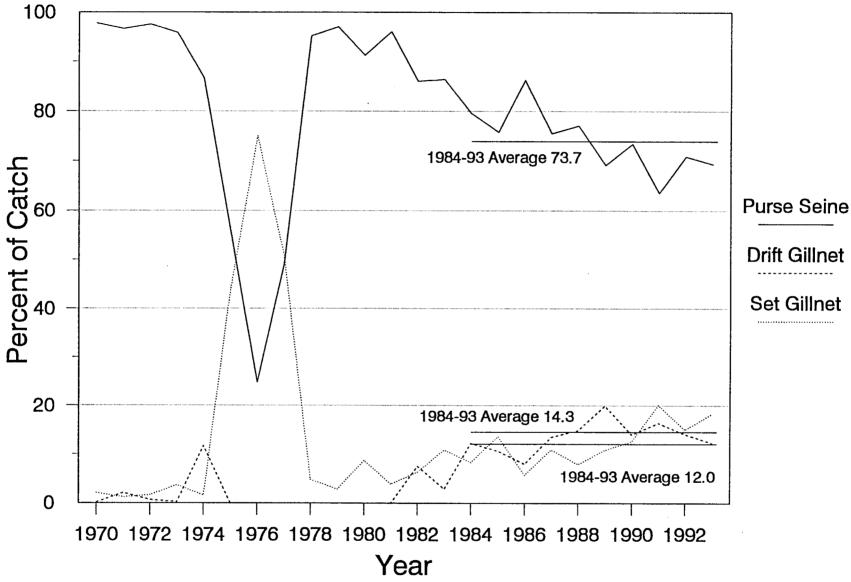


Figure 25. South Peninsula post June fisheries coho salmon catch by gear, 1970-93.

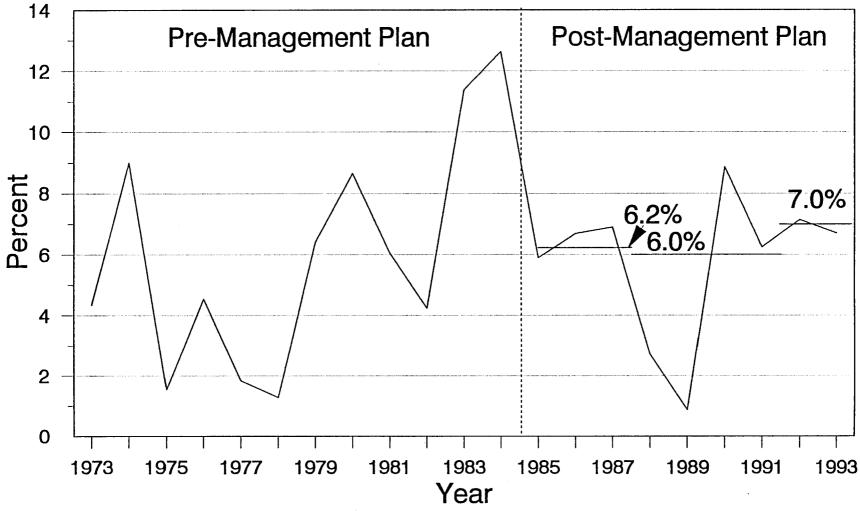


Figure 26. Harvest of Chignik bound sockeye salmon in the Southeastern District Mainland area, through July 25, in percent, 1973-93.

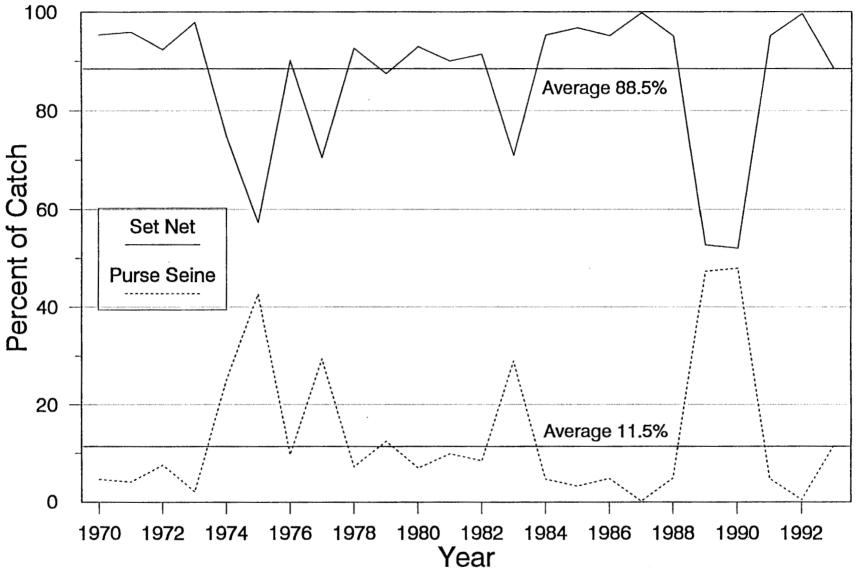


Figure 27. Southeastern District Mainland sockeye salmon catch in percent by gear type, through July 25, 1970-93.

**APPENDIX** 

## APPENDIX A: EMERGENCY ORDER SUMMARY

Appendix A.1. South Peninsula emergency order summary, 1993.

EMERGENCY ORDER NO. 4-FS-M-CB-02-93

EFFECTIVE DATE: June 1, 1993

EXPLANATION: This emergency order closes the waters near Sanak Island (bound by the latitude of Hague Rock and the longitude of Cape Pankof Light south of the latitude of Hague Rock) to commercial salmon fishing during June 13 through July 5, 1993.

<u>JUSTIFICATION:</u> There is a limit to the number of chum salmon that can be taken in the South Unimak and Shumagin Islands June fisheries (these fisheries will begin no earlier than June 13 and could potentially extend until July 5), although sockeye are the targeted species. If the chum cap is reached, the fishery will close regardless of the unharvested sockeye allocation.

In the past, the area around Sanak Island has produced high chum to sockeye ratios. Historically, commercial salmon fishing records indicate a very limited to non-existent fishing effort near Sanak Island, although during 1990 and 1991, fishing interest increased. Even though the fishing effort was light (i.e. less than four boats), the corresponding catch per unit of effort combined with the high chum per sockeye ratio could result in substantial numbers of chum salmon being harvested, if effort were to increase. A substantial amount of effort around Sanak Islands could result in a loss of sockeye salmon to the South Unimak-Shumagin Islands June fisheries.

EMERGENCY ORDER NO. 4-F-M-SP-15-93

EFFECTIVE DATE: 2:00 p.m. June 4, 1993

EXPLANATION: This emergency order increases the closed waters area at the outlet of Acheredin Lake on Unga Island and Red Cove Lake on Popof Island as follows:

- A. Acheredin Lake: all waters in Acheredin Bay North of a line extending from 55°10′42" N. lat., 160°40′42" W.long. to 55°11′54" N. lat., 160°42′30" W.long.
- B. Red Cove Lake: all waters in Red Cove within 1,000 yards of the lake outlet.

<u>JUSTIFICATION:</u> The sockeye salmon escapement goal in Acheredin Lake is 6,000 to 12,000 salmon with a point estimate of 7,500 salmon. Since 1986 the lower range of the escapement goal (6,000 salmon) has only been achieved once, during 1989. Since 1989, the escapement trend has been decreasing and in 1992 the escapement was only 1,125 sockeye salmon. An expanded closed waters area is needed to achieve the escapement goal.

The Aleutians East Borough, on an annual basis, has provided funds to open the outlet at Red Cove Lake on Popof Island during the spring smolt out migration and for returning adult salmon in the fall. An expanded closed waters area is needed to protect returning adult salmon and to bring this lake back to it's full production level.

<sup>-</sup>Continued-

EMERGENCY ORDER NO. 4-F-M-SP-16-93

EFFECTIVE DATE: 9:00 a.m., June 12, 1993

EXPLANATION: This emergency order allows a 24 hour salmon fishing period from 9:00 a.m. Saturday, June 12, 1993 until 9:00 a.m. Sunday, June 13, 1993 in the Southeastern District Mainland area: East Stepovak, Stepovak Flats, Northwest Stepovak (except for Orzinski Bay: all waters in Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long., to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.), Southwest Stepovak, Balboa Bay, and Beaver Bay Sections.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360.

As of 11:00 a.m. June 10, the sockeye escapement in Chignik is about 49,000 to 50,000 salmon, the first escapement goal is 40,000 sockeye salmon by June 12.

Test fishing in the Chignik Area today, June 10, indicate a steady stream of salmon entering the lagoon and an estimated 40,000 to 50,000 sockeye salmon present in the lagoon. The test fishery today indicated a good increase in the number of salmon over the test fishery on June 9. In the Chignik Management Area, the Chignik Bay, Eastern, and Central Districts will open to commercial salmon fishing on June 12 for 24 hours. In the Kodiak Management Area, Cape Igvak will also open to commercial salmon fishing on June 12 for a 48 hour period.

A 9:00 a.m. Saturday, June 12 until 9:00 a.m. Sunday, June 13 fishing period in the Southeastern District Mainland area will give fishermen the opportunity to catch their allocation (7% of the total Chignik destined harvest prior to July 26).

Orzinski Bay is managed on the strength of the sockeye salmon run into Orzinski Lake. The Orzinski Lake run usually does not begin until the end of June. Currently, no salmon have passed the Orzinski Lake weir, therefore Orzinski Bay will remain closed to commercial salmon fishing.

EMERGENCY ORDER NO. 4-FS-M-CB-05-93

EFFECTIVE DATE: 6:00 a.m. June 13, 1993

EXPLANATION: This emergency order allows a 6:00 a.m. until 10:00 p.m. commercial salmon fishing period during June 13 in the South Unimak and Shumagin Island fisheries.

<u>JUSTIFICATION:</u> The June 13 - 18 sockeye allocations for the Shumagin Islands and South Unimak fisheries are 183,000 and 831,000 fish respectively. A 700,000 chum salmon ceiling is placed over both fisheries combined. Test fishing in the Shumagin Islands during June 7 - 10 indicated that the daily sockeye to chum ratios ranged from 3.6 to 1.0 to 8.2 to 1.0 with and average of 6.2 sockeye per chum. These ratios are very good and many of these fish should be at South Unimak on June 13. A fishing period should be allowed on June 13, the earliest date specified in the Alaska Board of Fisheries adopted South Unimak and Shumagin Islands June Salmon Management Plan, to allow fishermen to harvest part of their allocation.

<sup>-</sup>Continued-

EMERGENCY ORDER NO. 4-FS-M-CB-06-93

EFFECTIVE DATE: 6:00 a.m. June 15, 1993

EXPLANATION: This emergency order allows a 6:00 a.m. until 10:00 p.m. commercial salmon fishing period during June 15 in the South Unimak and Shumagin Island fisheries.

<u>JUSTIFICATION:</u> The June 12 - 18 sockeye allocations for the Shumagin Islands and South Unimak fisheries are 183,000 and 831,000 fish respectively. A 700,000 chum salmon ceiling is placed over both fisheries combined. A 16 hour fishing period on June 13 produced a harvest of 89,000 sockeye in the Shumagin Islands and 262,000 sockeye at South Unimak. The combined chum salmon catch was 45,000. More fishing time is needed to harvest the June 13 - 18 sockeye allocations while the sockeye to chum ratio is favorable.

EMERGENCY ORDER NO. 4-F-M-SP-17-93

EFFECTIVE DATE: 6:00 a.m. June 15, 1993

EXPLANATION: This emergency order allows a 24 hour salmon fishing period from 6:00 a.m. Tuesday, June 15, 1993 until 6:00 a.m. Wednesday, June 16, 1993 in the Southeastern District Mainland area: East Stepovak, Stepovak Flats, Northwest Stepovak (except for Orzinski Bay: all waters in Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long., to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.), Southwest Stepovak, Balboa Bay, and Beaver Bay Sections.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360.

As of 12:00 p.m. midnight, June 12, the sockeye escapement in Chignik was 99,093 salmon, and the first count in the morning of June 13 was an additional 3,180 salmon. The first escapement goal is 40,000 sockeye salmon by June 12 and 50,000 to 65,000 by June 14.

The Chignik Bay, Central, and Eastern Districts opened to commercial salmon fishing on June 12 and have remained open but no salmon deliveries have been made in the Chignik Area due to price disputes. If Chignik fishers were fishing they should have caught an estimated 100,000 sockeye salmon.

In the Kodiak Management Area, Cape Igvak opened to commercial salmon fishing on June 12 and the period was extended until 12:01 a.m. June 13. The estimated harvest in the Cape Igvak Section is 16,000 Chignik bound salmon.

During the 9:00 a.m. Saturday, June 12 until 9:00 a.m. Sunday, June 13 fishing period in the Southeastern District Mainland area an estimated 5,000 Chignik bound sockeye salmon were harvested.

A 6:00 a.m. Tuesday, June 15 until 6:00 a.m. Wednesday, June 16 fishing period in the Southeastern District Mainland area will give fishermen the opportunity to catch their allocation (7% of the total Chignik destined harvest prior to July 26). Orzinski Bay is managed on the strength of the sockeye salmon run into Orzinski Lake. The Orzinski Lake run usually does not begin until the end of June. Currently, no salmon have passed the Orzinski Lake weir, therefore Orzinski Bay will remain closed to commercial salmon fishing.

<sup>-</sup>Continued-

EMERGENCY ORDER NO. 4-FS-M-CB-07-93

EFFECTIVE DATE: 10:00 p.m. June 15, 1993

EXPLANATION: This emergency order extends the present commercial salmon fishing period 20 hours until 6:00 p.m. Wednesday, June 16 in the South Unimak fishery.

<u>JUSTIFICATION:</u> The June 12 - 18 sockeye allocations for the Shumagin Islands and South Unimak fisheries are 183,000 and 831,000 fish respectively. A 700,000 chum salmon ceiling is placed over both fisheries combined. A 16 hour fishing period on June 13 produced a harvest of 89,000 sockeye in the Shumagin Islands and 262,000 sockeye at South Unimak. The combined chum salmon catch was 45,000.

It is quite possible that the Shumagin Island June 13 - 18 sockeye allocation will be reached by 10:00 p.m. June 15 and no more fishing time should be allowed until the June 15 harvest is known. More fishing time will be needed to harvest the June 13 - 18 South Unimak sockeye allocation based on the June 13 harvest and June 15 reports from the grounds. Reports from the grounds indicate that the sockeye to chum ration is still generally very good. More fishing time should be allowed at this time to enable South Unimak fishermen to harvest their sockeye allocation while the sockeye to chum ratio is high.

EMERGENCY ORDER NO. 4-F-M-SP-18-93

EFFECTIVE DATE: 6:00 a.m. June 16, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 26 hours until 8:00 a.m. Thursday, June 17, 1993 in the Southeastern District Mainland area: East Stepovak, Stepovak Flats, Northwest Stepovak (except for Orzinski Bay: all waters in Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long., to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.), Southwest Stepovak, Balboa Bay, and Beaver Bay Sections.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360.

As of 12:00 p.m. midnight, June 14, the sockeye escapement in Chignik was 144,019 salmon, and the first count during the morning of June 15 was an additional 4,328 salmon. The June 14 escapement goal is 50,000 to 65,000 sockeye salmon.

The Chignik Bay, Central, and Eastern Districts opened to commercial salmon fishing on June 12 and have remained open but no salmon deliveries have been made in the Chignik Area due to price disputes. If Chignik fishers were fishing they should have caught an estimated 200,000 sockeye salmon.

In the Kodiak Management Area, Cape Igvak opened to commercial salmon fishing on June 12 and the period was extended until 12:01 a.m. June 16.

During the 9:00 a.m. Saturday, June 12 until 9:00 a.m. Sunday, June 13 fishing period in the Southeastern District Mainland area an estimated 4,296 Chignik bound sockeye salmon were harvested. During the current fishing period, that began at 6:00 a.m. Tuesday, June 15, fishing has been very slow; through 4:00 p.m. June 15 the estimated harvest has been less than 1,600 sockeye salmon.

<sup>-</sup>Continued-

A 26 hour extension until 8:00 a.m. Thursday, June 17 in the Southeastern District Mainland area will give fishermen the opportunity to catch their allocation (7% of the total Chignik destined harvest prior to July 26). Orzinski Bay is managed on the strength of the sockeye salmon run into Orzinski Lake. The Orzinski Lake run usually does not begin until the end of June. Currently, no salmon have passed the Orzinski Lake weir, therefore Orzinski Bay will remain closed to commercial salmon fishing.

EMERGENCY ORDER NO. 4-FS-M-CB-09-93

EFFECTIVE DATE: 6:00 p.m. June 16, 1993

EXPLANATION: This emergency order extends the present commercial salmon fishing period 24 hours until 6:00 p.m. Thursday, June 17 in the South Unimak fishery. A 6:00 a.m. until 10:00 p.m. fishing period is established for June 17 in the Shumagin Islands Section.

<u>JUSTIFICATION:</u> The June 13 - 18 sockeye allocations for the Shumagin Islands and South Unimak fisheries are 183,000 and 831,000 fish respectively. A 700,000 chum salmon ceiling is placed over both fisheries combined. To date 509,000 sockeye salmon have been harvested at South Unimak, while the Shumagin Islands sockeye harvest is 139,000 for a total of 648,000 sockeye for both fisheries combined. The chum salmon harvest for both fisheries combined is 93,000 for a sockeye to chum ratio of 6.97 to 1.0 which is excellent. Based on the June 15 South Unimak sockeye harvest of 248,000 it is estimated that another 24 hours of fishing time will be required to harvest the June 13 - 18 allocation. The effort in the Shumagin Islands dropped substantially after the June 15 fishing period due to some of the purse seiners moving to South Unimak. It is estimated that 16 hours will be required to harvest the balance (44,000) of the Shumagin June 13 - 18 allocation due to decreased effort and June 15 catches.

EMERGENCY ORDER NO. 4-FS-M-CB-10-93

EFFECTIVE DATE: 6:00 p.m. June 19, 1993

EXPLANATION: This emergency order allows a 6:00 a.m. until 10:00 p.m. fishing period during Saturday, June 19 in the South Unimak and Shumagin Island June fisheries.

<u>JUSTIFICATION:</u> The June 19 - 25 sockeye allocations for the Shumagin Islands and South Unimak fisheries are 236,000 and 1,069,000 fish respectively. A 700,000 chum salmon ceiling is placed over both fisheries combined. To date 144,000 chum salmon have been harvested. A 16 hour fishing period on June 19 will enable fishermen to harvest part of their June 19 - 25 sockeye allocation and to test the chum salmon abundance before more fishing time is allowed.

EMERGENCY ORDER NO. 4-FS-M-CB-11-93

EFFECTIVE DATE: 10:00 p.m. June 19, 1993

EXPLANATION: This emergency order extends the present commercial salmon fishing period 20 hours until 6:00 p.m. Sunday, June 20 in the South Unimak and Shumagin Island June fisheries.

<u>JUSTIFICATION:</u> The June 19 - 25 sockeye allocations for the Shumagin Islands and South Unimak fisheries are 236,000 and 1,069,000 fish respectively. A 700,000 chum salmon ceiling is placed over both fisheries combined. Through June 18, 187,000 chums have been harvested. Reports from the grounds during June 19 indicate that the sockeye to chum ratio is still generally high. A 20 hour extension of the fishing period will enable the fleets to harvest a large portion of their June 19 - 25 sockeye allocation while the sockeye to chum ratio is believed to be very good. The ratio could drastically deteriorate at a later date as happened in 1991. With such large sockeye allocations, it is highly unlikely that the harvest will come close to reaching the allocations in two days.

EMERGENCY ORDER NO. 4-FS-M-CB-12-93

EFFECTIVE DATE: 6:00 p.m. June 20, 1993

<u>EXPLANATION:</u> This emergency order extends the present commercial salmon fishing period 4 hours until 10:00 p.m. Sunday, June 20 in the South Unimak fishery. Fishing time is extended 24 hours until 6:00 p.m. Monday June 21 in the Shumagin Island fishery.

<u>JUSTIFICATION</u>: The June 19 - 25 sockeye allocations for the Shumagin Islands and South Unimak fisheries are 236,000 and 1,069,000 fish respectively. A 700,000 chum salmon ceiling is placed over both fisheries combined. Through June 19, 239,000 chums have been harvested. Reports from the grounds during June 20 indicate that the sockeye to chum ratio is still generally high. A 4 hour extension in the South Unimak Fishery will enable the fleets to take advantage of the evening tide. The June 19 - 25 sockeye allocation is so high that there is no danger of exceeding it in two days.

The June 19 Shumagin Islands harvest was 47,000 sockeye, at that rate considerably more fishing time will be required to harvest the June 19 - 25 allocation.

EMERGENCY ORDER NO. 4-FS-M-CB-13-93

EFFECTIVE DATE: 6:00 p.m. June 21, 1993

<u>JUSTIFICATION:</u> There are 252,000 sockeye left to be harvested from the June 19 - 25 allocation for the South Unimak fishery. A very large portion, if not the bulk, of the South Unimak harvest during the June 19 and 20 opening were taken during the late afternoon tide. Catches during June 19 and 20 averaged 409,000 fish per day. The maximum flood during June 22 at Scotch Cap is at 7:22 p.m. . A 12 hour fishing period ending at 6:00 p.m. should allow fishermen to harvest fish during periods of low abundance during only early stages of the evening flood, resulting in a harvest of roughly 250,000 sockeye.

The Shumagin Islands sockeye June 19 - 25 harvest through June 20 is 102,000 below the allocation for that period. The June 20 (24 hour) harvest was 99,000 sockeye. A four hour extension of the June 21 fishing period should bring this days harvest to the June 20 level which is needed to reach the June 19 - 25 allocation.

Sockeye to chum ratios remain excellent (over 7 to 1 in both South Unimak and the Shumagin Islands during June 20). The total chum harvest to date is 320,000 which is far below the 700,000 ceiling.

EMERGENCY ORDER NO. 4-FS-M-CB-14-93

EFFECTIVE DATE: 6:00 a.m. June 26, 1993

EXPLANATION: This emergency order allows a 6:00 a.m. until 10:00 p.m. commercial salmon fishing period during Saturday, June 26 in the Shumagin Islands Section. A 6:00 a.m. until 4:00 p.m. fishing period is established for seine and drift gillnet gear in the South Unimak fishery during Saturday, June 26. A 6:00 a.m. until 10:00 p.m. fishing period is established for set gillnet gear in the South Unimak fishery during Saturday, June 26.

<u>JUSTIFICATION:</u> There are 94,000 and 218,000 sockeye left to be harvested during the June 26 - 30 period in the Shumagin Islands and South Unimak fisheries respectively. The combined chum salmon harvest from both fisheries combined is 409,000 which is 291,000 fish below the 700,000 chum cap. The harvest of 75,000 chum salmon at South Unimak during June 22 is the largest catch per day this season. In case the number of chums greatly increases over the June 22 level, it is necessary to limit fishing time for seine and drift gillnet gear until it can be determined that the sockeye to chum ratio is satisfactory.

The South Unimak and Shumagin Islands June Salmon Management Plan states that set gillnet gear will not be given less than 16 hours of fishing time when fishing time for other gear types is less than 16 hours to reduce the chum salmon harvest. In the past, unexpected high chum salmon harvests have not occurred in the Shumagin Islands, and the ratio of sockeye to chum was 8:1 during the last fishing period on June 21. Fishing time is needed to harvest the remainder of the sockeye allocations.

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EMERGENCY ORDER NO. 4-F-M-SP-20-93

EFFECTIVE DATE: 8:00 a.m. June 26, 1993

EXPLANATION: This emergency order allows a 24 hour commercial salmon fishing period from 8:00 a.m. Saturday, June 26, 1993 until 8:00 a.m. Sunday, June 27, 1993 in the Southeastern District Mainland area: East Stepovak, Stepovak Flats, Northwest Stepovak (except for Orzinski Bay: all waters in Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long., to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.), Southwest Stepovak, Balboa Bay, and Beaver Bay Sections.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360.

As of 12:00 p.m. midnight, June 23, the sockeye escapement in Chignik was 347,398 salmon. The June 25 escapement goal is 275,000 to 325,000 sockeye salmon.

The Chignik Bay, Central, and Eastern Districts have remained open to commercial salmon fishing since June 12. The Chignik Area sockeye salmon catch will be about 300,000 salmon by midnight June 23, and catches remain strong in cape areas.

In the Kodiak Management Area, the Cape Igvak Section catch of Chignik bound sockeye salmon is about 64,379 salmon. The Cape Igvak Section will open for 48 hours on June 26.

In the Southeastern District Mainland fishery the catch of Chignik bound sockeye salmon is about 27,116 salmon (about 7.0% of the harvest as estimated through midnight June 23.

A 24 hour fishing period from 8:00 a.m. Saturday, June 26 until 8:00 a.m. Sunday, June 27 in the Southeastern District Mainland area will give fishermen the opportunity to catch their allocation (7% of the total Chignik destined harvest prior to July 26). Orzinski Bay is managed on the strength of the sockeye salmon run into Orzinski Lake. The Orzinski Lake run usually does not begin until the end of June. Currently, no salmon have passed the Orzinski Lake weir, therefore Orzinski Bay will remain closed to commercial salmon fishing.

EMERGENCY ORDER NO. 4-FS-M-CB-16-93

EFFECTIVE DATE: 4:00 p.m. June 26, 1993

<u>EXPLANATION:</u> This emergency order extends the present commercial salmon fishing period 6 hours until 10:00 p.m. Saturday, June 26 in the South Unimak Fishery for seine and drift gillnet gear.

<u>JUSTIFICATION:</u> Emergency order 4-FS-M-CB-14-93 established a 6:00 a.m. until 4:00 p.m. commercial salmon fishing period for seine and drift gillnet gear so that the fishery could be closed before an excessive number of chums would be caught if large numbers of chum salmon are present. Weather has almost completely prevented fishing during the early part of the fishing period and reports indicate that there is a high sockeye to chum ratio in what fishing is taking place. A six hour extension can be granted at this time without large numbers of chums being caught.

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EMERGENCY ORDER NO. 4-FS-M-CB-17-93

EFFECTIVE DATE: 10:00 p.m. June 26, 1993

EXPLANATION: This emergency order extends the present commercial salmon fishing period 18 hours until 4:00 p.m. Sunday, June 27 in the South Unimak fishery.

<u>JUSTIFICATION:</u> Weather continues to keep nearly the entire fleet from fishing at South Unimak. The sockeye to chum ratio is very high from what catches have been reported. More fishing time is needed for the fleet to harvest the remaining 218,000 sockeye in the South Unimak allocation, while the sockeye to chum ratio is high. There is a 700,000 chum salmon catch ceiling over both the South Unimak and Shumagin Islands June fisheries combined.

EMERGENCY ORDER NO. 4-FS-M-CB-18-93

EFFECTIVE DATE: 4:00 p.m. June 27, 1993

EXPLANATION: This emergency order extends the present commercial salmon fishing period six (6) hours until 10:00 p.m. Sunday, June 27 in the South Unimak fishery.

<u>JUSTIFICATION:</u> Weather continues to keep nearly the entire fleet from fishing at South Unimak. The sockeye to chum ratio is very high from what catches have been reported. More fishing time is needed for the fleet to harvest the remaining 185,000 sockeye in the South Unimak allocation, while the sockeye to chum ratio is high. There is a 700,000 chum salmon catch ceiling over both the South Unimak and Shumaqin Islands June fisheries combined.

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EMERGENCY ORDER NO. 4-F-M-SP-21-93

EFFECTIVE DATE: 6:00 a.m. June 28, 1993

EXPLANATION: This emergency order allows a 12 hour commercial salmon fishing period from 6:00 a.m. Monday, June 28, 1993 until 6:00 p.m. Monday, June 28, 1993 in the Shumagin Islands Section.

<u>JUSTIFICATION:</u> The Shumagin Islands Section fishery is managed on the basis of Bristol Bay sockeye salmon prior to July 1 as described under 5 AAC 09.365.

There are about 35,000 sockeye salmon remaining to be harvested during the June 26-30 allocation period. The combined chum salmon harvest from both fisheries combined is about 450,000 salmon which is 250,000 salmon below the 700,000 chum salmon cap.

The June salmon management plan states that fishing periods will be the same for all gear types when the fishing period is less than 16 hours because the sockeye salmon allocation is anticipated to be harvested.

A 12 hour fishing period from 6:00 a.m. Monday, June 28 until 6:00 p.m. Monday, June 28 in the Shumagin Islands Section fishery should give fishermen the opportunity to catch their allocation (35,000 sockeye salmon).

EMERGENCY ORDER NO. 4-FS-M-CB-19-93

EFFECTIVE DATE: 6:00 a.m. June 29, 1993

<u>EXPLANATION:</u> This emergency order establishes a 6:00 a.m. until 2:00 p.m. commercial salmon fishing period during June 29 in that portion of the South Unimak fishery located east of the Cape Lutke Section.

<u>JUSTIFICATION:</u> There are 56,000 sockeye left to be harvested in the South Unimak allocation. The June 27 reported harvest was 129,000 with some of the fish actually being harvested on June 26 and held in RSW until the 27th. If the area open to fishing does not include the Cape Lutke Section, an eight hour fishing period on June 29 should result in a harvest in the vicinity of 56,000. There were also indications that large numbers of chum salmon were moving into the Cape Lutke Section during June 27. As of June 27, the combined South Unimak - Shumagin Islands chum harvest was 236,000 below the harvest ceiling.

EMERGENCY ORDER NO. 4-F-M-SP-22-93

EFFECTIVE DATE: 10:00 a.m. July 3, 1993

EXPLANATION: This emergency order allows a 72 hour salmon fishing period from 10:00 a.m. Saturday, July 3, 1993 until 10:00 a.m. Tuesday, July 6, 1993 in all waters of Orzinski Bay north of a line from Elephant Point (55°41'50" N.lat., 160°03'18" W.long.) to Waterfall Point (55°43'10" N.lat., 160°01'08" W.long.).

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360.

As of 9:00 a.m. July 2, the sockeye escapement past Orzinski weir is 4,664 salmon, the first escapement goal is 2,000 sockeye salmon by July 1 and the next goal is 5,000 by July 9.

A 10:00 a.m. Saturday, July 3 until 10:00 a.m. Tuesday, July 6 fishing period in Orzinski Bay is appropriate because there are salmon in excess to escapement requirements.

EMERGENCY ORDER NO. 4-F-M-SP-23-93

EFFECTIVE DATE: 5:00 p.m. July 3, 1993

EXPLANATION: This emergency order reduces the closed waters at Orzinski River to within 500 yards of the stream terminus from 5:00 p.m. Saturday, July 3 until 10:00 a.m. Tuesday, July 6, 1993.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360.

As of 9:00 a.m. July 3, the sockeye escapement past Orzinski weir is about 6,000 salmon, the second escapement goal of 5,000 sockeye salmon by July 9 has already been exceeded. Moving the markers within 500 yards of the river terminus will allow fishers to harvest the salmon that are excess to escapement requirements.

EMERGENCY ORDER NO. 4-F-M-SP-24-93 EFFECTIVE DATE: 10:00 a.m. July 6, 1993

EXPLANATION: This emergency order extends the commercial salmon fishing period 144 hours until 10:00 a.m., Monday, July 12, 1993 in all waters of Orzinski Bay north of a line from Elephant Point (55°41′50" N.lat., 160°03′18" W.long.) to Waterfall Point (55°43′10" N.lat., 160°01′08" W.long.).

This emergency order extends the time period of the reduced closed waters at Orzinski River to within 500 yards of the stream terminus until 10:00 a.m. Monday, July 12, 1993.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of the local sockeye salmon return to Orzinski Lake.

As of 12:00 p.m. midnight, July 4, the sockeye escapement past Orzinski weir was 8,124 salmon, the second escapement goal of 5,000 sockeye salmon by July 9 has been exceeded and the third goal of 10,000 sockeye salmon by July 16 will likely be exceeded. During July 1-4, the escapement has averaged 1,592 sockeye salmon per day. Continuous salmon fishing through July 12 is needed to harvest salmon that are excess to escapement requirements.

Moving the markers within 500 yards of the river terminus will allow fishers to more efficiently harvest salmon that are excess to escapement requirements.

EMERGENCY ORDER NO. 4-FS-M-CB-22-93

EFFECTIVE DATE: 7:00 a.m. July 7, 1993

EXPLANATION: This emergency order establishes a 7:00 a.m. until 9:00 p.m. commercial salmon fishing period during July 7 in the following locations:

- 1. Morzhovoi Bay Section
- 2. Thin Point Section
- 3. Cold Bay Section
- 4. Canoe Bay Section
- 5. That portion of the Pavlof Bay Section located north of 55 deg. 24 min. 34 sec. N lat. the latitude of Black Point
- 6. Zachary Bay located south of 55 deg. 22 min. 39 sec. N lat.
- 7. Stepovak Flats Section

The closed waters of Thin Point Cove are reduced to include only those waters within 1,000 yards of the Thin Point Lagoon terminus and those waters within 500 yards of all other salmon streams emptying into Thin Point Cove.

<u>JUSTIFICATION:</u> South Peninsula sockeye and chum salmon should be entering locations where the Post June Salmon Management Plan for the Southern Alaska Peninsula allows fishing, outside of the Southeastern District Mainland. A short opening at this time will allow the fleet to harvest salmon and test run strength. A strong sockeye run is anticipated into Thin Point Lake and fishing time is needed to test the run.

EMERGENCY ORDER NO. 4-F-M-SP-25-93

EFFECTIVE DATE: 6:00 p.m. July 8, 1993

EXPLANATION: This emergency order allows a 24 hour salmon fishing period from 6:00 p.m. Thursday, July 8, 1993 until 6:00 p.m. Friday, July 9, 1993 in the Southeastern District Mainland area: East Stepovak, Stepovak Flats, Northwest Stepovak (except for Orzinski Bay: all waters of Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long. to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.), Southwest Stepovak, Balboa Bay, and Beaver Bay Sections.

This emergency order supersedes emergency order number 4-F-M-SP-23-93 in regards to closed waters at Orzinski River: closed waters at Orzinski River are expanded to within 1,000 yards of the stream terminus of the Orzinski River effective 6:00 p.m. Thursday, July 8.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of the local sockeye salmon return to Orzinski Lake and is currently open to commercial salmon fishing (Emergency Order 4-F-M-SP-24-93) until 10:00 a.m. Monday, July 12, 1993.

As of 12:00 p.m., midnight, July 6, the sockeye escapement past Orzinski weir was about 8,124 salmon, the second escapement goal of 5,000 sockeye salmon by July 9 has been exceeded, the next escapement goal is 10,000 salmon by July 16. There has been on escapement past the Orzinski weir on July 5-6; moving the markers from 500 yards to 1,000 yards of the river terminus is needed to allow additional escapement for the July 16 escapement goal to be met.

As of 12:00 p.m. midnight, July 6, the sockeye escapement in Chignik was 368,800 early and 66,398 late run salmon. The Chignik Area sockeye salmon catch is about 836,328 salmon or 81.0% of the total Chignik bound sockeye salmon catch. All districts in the Chignik Area will open to commercial salmon fishing on July 7.

In the Kodiak Management Area, the Cape Igvak Section catch of Chignik bound sockeye salmon is about 142,450 salmon or 13.8%. The Cape Igvak Section is expected to have a commercial salmon fishing period on July 17.

In the Southeastern District Mainland fishery the catch of Chignik bound sockeye salmon is about 54,302 salmon or 5.3%. A 24 hour fishing period from 6:00 p.m. Thursday, July 8 until 6:00 p.m. Friday, July 9 in the Southeastern District Mainland area will give fishermen the opportunity to catch their allocation (7% of the total Chignik destined harvest prior to July 26).

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EMERGENCY ORDER NO. 4-F-M-SP-26-93

EFFECTIVE DATE: 7:00 a.m. July 14, 1993

EXPLANATION: This emergency order allows a 14 hour salmon fishing period from 7:00 a.m. Wednesday, July 14, 1993 until 9:00 p.m. Wednesday, July 14, 1993 in the following locations:

- Morzhovoi Bay Section
- 2. Thin Point Section
- 3. Cold Bay Section
- 4. That portion of the Pavlof Bay Section located north of the latitude of Black Point (55°24'34" N.lat.)
- 5. Canoe Bay Section
- That portion of Zachary Bay located south of 55°22'39"N.lat.
- 7. Southeastern District Mainland area: East Stepovak, Stepovak Flats, Northwest Stepovak (except for Orzinski Bay: all waters of Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long. to Waterfall Point 55°43′10" N.lat., 160°01′08"W.long.), Southwest Stepovak, Balboa Bay, and Beaver Bay Sections.

<u>JUSTIFICATION:</u> South Peninsula sockeye and chum salmon should be entering locations where fishing is allowed prior to July 20 in that portion of the South Peninsula located outside the Southeastern District Mainland area. A 14 hour opening at this time will allow fishers to harvest salmon and test run strength.

Due to the relatively small area open to commercial salmon fishing in South Peninsula waters the effort is expected to be intense.

<sup>-</sup>Continued-

The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of local sockeye salmon returning to Orzinski Lake. Orzinski Bay is currently scheduled to close to commercial salmon fishing (Emergency Order 4-F-M-SP-25-93) on 10:00 a.m. Monday, July 12, 1993 to allow additional escapement into Orzinski Lake.

As of 12:00 p.m. midnight, July 9, the sockeye escapement in Chignik was 388,780 early and 101,238 late run salmon. The Chignik Area sockeye salmon catch through July 9, is about 1,006,522 salmon or 81.5% of the total Chignik bound sockeye salmon catch. All districts in the Chignik Area are currently open and scheduled to close at 5:00 p.m. Tuesday, July 13.

In the Kodiak Management Area, the Cape Igvak Section catch of Chignik bound sockeye salmon through July 9, is about 151,522 salmon or 12.3%.

In the Southeastern District Mainland fishery the catch of Chignik bound sockeye salmon through July 9, is about 76,698 salmon or 6.2%. The mainland area is open to both set gillnet and purse seine fishers after July 10. A 14 hour fishing period from 7:00 a.m. until 9:00 p.m. Wednesday, July 14 in the Southeastern District Mainland area will give fishers the opportunity to catch their allocation (7% of the total Chignik destined harvest prior to July 26).

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EMERGENCY ORDER NO. 4-F-M-SP-27-93

EFFECTIVE DATE: 7:00 a.m. July 14, 1993

EXPLANATION: This emergency order allows a 14 hour salmon fishing period from 7:00 a.m. Wednesday, July 14, 1993 until 9:00 p.m. Wednesday, July 14, 1993 in Orzinski Bay: all waters of Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long. to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of the local sockeye salmon return to Orzinski Lake.

As of 8:00 p.m. July 13, the sockeye escapement past Orzinski weir was about 10,000 salmon, essentially meeting the July 16 escapement goal of 10,000 salmon.

A fishing period from 7:00 a.m. until 9:00 p.m. Wednesday July 14 in Orzinski Bay will help distribute fishing effort by matching a similar fishing period in the balance of the Southeastern District Mainland area.

EMERGENCY ORDER NO. 4-F-M-SP-28-93

EFFECTIVE DATE: 9:00 p.m. July 14, 1993

EXPLANATION: This emergency order extends the commercial salmon fishing period 41 hours until 2:00 p.m., Friday, July 16, 1993 in all waters of Orzinski Bay north of a line from Elephant Point (55°41′50" N.lat., 160°03′18" W.long.) to Waterfall Point (55°43′10" N.lat., 160°01′08" W.long.).

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of the local sockeye salmon return to Orzinski Lake.

As of 12:00 p.m. midnight, July 13, the sockeye escapement past Orzinski weir was 10,159 adult and 840 jack salmon for a total of 10,999 salmon. The third escapement goal of 10,000 sockeye salmon by July 16 has been exceeded. Continuous salmon fishing through July 16 is needed to harvest salmon that are excess to escapement requirements. The fishery will close on July 16 to provide escapement for the fourth goal of 15,000 salmon by July 23.

EMERGENCY ORDER NO. 4-FS-M-CB-32-93

EFFECTIVE DATE: 7:00 a.m. July 20, 1993

EXPLANATION: This emergency order establishes a 7:00 a.m. July 20 until 9:00 p.m. July 22 commercial salmon fishing period in the Shumagin Islands Section, that portion of the South Central District located outside of the Canoe Bay Section, Southwestern District, Sanak Island Section and Otter Cove Section.

The closed waters of Thin Point Cove are expanded to include the entire cove as described on page 38 of the regulation book during July 20 through July 24. After July 24, the closed waters will again be reduced to include only those waters within 1,000 yards of Thin Point Lagoon and to 500 yards of the other salmon streams in Thin Point Cove. This emergency order supersedes emergency order 4-FS-M-CB-22-93 in regards to the closed waters of Thin Point Cove.

<u>JUSTIFICATION:</u> A pink salmon harvest of six million fish is projected for the South Peninsula. The run should arrive in strength by July 20 and fishing time is needed to test run strength and harvest pink salmon while quality is at it's best. The chum run into Canoe Bay appears weak, consequently the Canoe Bay Section will remain closed. Due to the minus tides that will occur during July 20 - 24, the closed waters of Thin Point Cove need to be expanded to prevent the existing sockeye escapement from backing out into the fishery.

EMERGENCY ORDER NO. 4-F-M-SP-29-93

EFFECTIVE DATE: 11:00 a.m. July 20, 1993

EXPLANATION: This emergency order allows a 36 hour salmon fishing period from 11:00 a.m. Tuesday, July 20, 1993 until 11:00 p.m. Wednesday, July 21, 1993 in Orzinski Bay: all waters of Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long. to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of the local sockeye salmon return to Orzinski Lake.

As of 12:00 p.m., midnight, July 18, the sockeye escapement past Orzinski weir was 12,902 adult salmon, meeting the July 16 escapement goal of 10,000 salmon and approaching the July 23 goal of 15,000.

<sup>-</sup>Continued-

A fishing period from 11:00 a.m. Tuesday, July 20 until 11:00 p.m. Wednesday July 21 in Orzinski Bay will help distribute fishing effort by occurring during a fishing period in the Shumagin Islands Section. A 36 hour fishing period will give fishers an opportunity to catch salmon that are in excess to escapement requirements.

EMERGENCY ORDER NO. 4-F-M-SP-30-93

EFFECTIVE DATE: 11:00 p.m. July 21, 1993

EXPLANATION: This emergency order extends the commercial salmon fishing period 13 hours until 12:00 a.m., Noon, Thursday, July 22, 1993 in Orzinski Bay: all waters of Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long. to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of the local sockeye salmon return to Orzinski Lake.

As of 12:00 p.m., midnight, July 19, the sockeye escapement past Orzinski weir was 13,986 adult salmon, approaching the July 23 goal of 15,000. The adult escapement on July 19 was 1,084 salmon.

A 13 hour extension to the current fishing period (11:00 a.m. Tuesday, July 20 until 11:00 p.m. Wednesday, July 21) until 12:00 a.m., Noon, Thursday July 22, in Orzinski Bay will help distribute fishing effort by occurring during a fishing period in the Shumagin Islands Section. A 13 hour extension to the fishing period will give fishers an opportunity to catch salmon that are in excess to escapement requirements.

EMERGENCY ORDER NO. 4-F-M-SP-31-93

EFFECTIVE DATE: 12:00 a.m., Noon, July 22, 1993

EXPLANATION: This emergency order extends the commercial salmon fishing period 19 hours until 7:00 p.m., Friday, July 23, 1993 in Orzinski Bay: all waters of Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long. to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of the local sockeye salmon return to Orzinski Lake.

As of 12:00 p.m., midnight, July 20, the sockeye escapement past Orzinski weir was 14,762 adult salmon, approaching the July 23 goal of 15,000. The adult escapement on July 20 was 776 salmon.

A 19 hour extension to the current fishing period until 7:00 p.m., Friday July 23, in Orzinski Bay will help distribute fishing effort by occurring during a fishing period in the Shumagin Islands Section. A 19 hour extension to the fishing period will give fishers an opportunity to catch salmon that are in excess to escapement requirements.

EMERGENCY ORDER NO. 4-F-M-SP-35-93

EFFECTIVE DATE: 7:00 a.m. July 24, 1993

EXPLANATION: This emergency order allows a 10 hour salmon fishing period from 7:00 a.m. Saturday, July 24, 1993 until 5:00 p.m. Saturday, July 24, 1993 in the following sections of the Southeastern District Mainland area:

- 1. East Stepovak Section
- 2. Northwest Stepovak Section (including Orzinski Bay: all waters of Orzinski Bay north of a line from Elephant Point 55°41′50" N.lat., 160°03′18" W.long. to Waterfall Point 55°43′10" N.lat., 160°01′08" W.long.)
- 3. Southwest Stepovak Section
- 4. Balboa Bay Section
- 5. Beaver Bay Section

<u>JUSTIFICATION:</u> The Southeastern District Mainland fishery, except for Orzinski Bay and the Stepovak Flats Section, is managed on the basis of Chignik sockeye salmon prior to July 26 as described under 5 AAC 09.360. Orzinski Bay is managed on the basis of the local sockeye salmon return to Orzinski Lake and the Stepovak Flats Section is managed on the basis of chum salmon returns to streams in the Stepovak Flats Section and Chignik sockeye salmon.

As of 12:00 p.m. midnight, July 21, the sockeye escapement past Orzinski weir was 15,648 salmon, the July 23 escapement goal of 15,000 sockeye salmon has been met. The final escapement goal is 20,000 sockeye salmon by August 7

As of 12:00 p.m. midnight, July 21, the sockeye escapement in Chignik was 397,013 early and 166,773 late run salmon. The Chignik Area sockeye salmon catch is about 1,323,512 salmon or 76.1% of the total Chignik bound sockeye salmon catch. All districts in the Chignik Area opened to commercial salmon fishing at 3:00 p.m. July 20.

In the Kodiak Management Area, the Cape Igvak Section catch of Chignik bound sockeye salmon is about 305,892 salmon or 17.6%. The Cape Igvak Section is expected to remain closed until the end of the management plan, midnight, July 25.

In the Southeastern District Mainland fishery the catch of Chignik bound sockeye salmon is about 109,845 salmon or 6.3%. A 10 hour fishing period from 7:00 a.m. until 5:00 p.m. Saturday, July 24 in the Southeastern District Mainland area will give fishermen the opportunity to catch their allocation (7% of the total Chignik destined harvest prior to July 26).

Chum salmon returns to Kodiak, South Peninsula, and Kuskokwim area streams are likely weak. The chum salmon stocks in the Stepovak Flats Section of the Southeastern District Mainland area also appear to be weak and need additional protection to achieve escapement objectives, therefore the Stepovak Flats Section will remain closed.

<sup>-</sup>Continued-

EMERGENCY ORDER NO. 4-FS-M-CB-35-93

EFFECTIVE DATE: 7:00 a.m. July 26, 1993

EXPLANATION: This emergency order establishes a 7:00 a.m. July 26 until 9:00 p.m. July 28 commercial salmon fishing period in that portion of the Southeastern, South Central, Southwestern, and Unimak Districts located outside of the Canoe Bay and Stepovak Flats Sections.

<u>JUSTIFICATION:</u> A six million pink salmon harvest is projected for the South Peninsula. The harvest during July 20 - 22 was 483,000 which was only slightly lower than the 1992 harvest for the same period. The 1992 pink salmon harvest of 9.8 million fish was the third highest ever for the South Peninsula. Pink salmon escapements in early systems indicate a strong return. Fishing time is needed to harvest the resource. The Stepovak Flats and Canoe Bay Sections will remain closed in order to protect weak chum salmon stocks.

EMERGENCY ORDER NO. 4-FS-M-CB-36-93

EFFECTIVE DATE: August 1, 1993

EXPLANATION: This emergency order establishes a 8:00 a.m. August 1 until 9:00 p.m. August 2 commercial salmon fishing period in the Southeastern, South Central, Southwestern, and Unimak Districts.

The following closed waters adjustments are made:

- 1. The closed waters to commercial salmon fishing in Thin Point Cove are changed back to the closed waters listed in the regulation book. This emergency order supersedes emergency order 4-FS-M-CB-32-93 in regards to Thin Point Cove.
- 2. The closed waters around Little John Lagoon are expanded to include all waters within three (3) nautical miles of the lagoon entrance.
- 3. The closed waters of Lenard Harbor are expanded to include all waters of Lenard Harbor east of 162 degrees 25 minutes 46 seconds W.long.
- 4. The closed waters of Grub Gulch are expanded to include all waters north of 55 degrees, 48 minutes N.lat.

<u>JUSTIFICATION</u>: The South Peninsula pink salmon run appears moderately strong and fishing time is needed to harvest the resource. It is impossible to accurately estimate the sockeye escapement into Thin Point Lagoon due to muddy water and there will be minus tides during the next several days which may cause the sockeye to back out of the lagoon. Thin Point Cove should be closed until the escapements can be determined and the tides are favorable. Chum salmon stocks appear weak throughout the South Peninsula and expanded closed waters are needed to protect them where the expanded waters are not expected to result in large numbers of unharvested pink and sockeye salmon.

EMERGENCY ORDER NO. 4-F-M-SP-36-93

EFFECTIVE DATE: 9:00 p.m. August 2, 1993

<u>JUSTIFICATION:</u> An aerial survey completed August 2, 1993 of Suzy Creek (281-10.03) indicated an escapement of 12,000 pink salmon and 3,000 pink salmon at the creek mouth. Six purse seine vessels in the vicinity of Suzy Creek were targeting pink salmon likely bound for the creek. At this time additional escapement is needed in Suzy Creek. Closing Dorenoi Bay and West Cove to commercial salmon fishing is needed to achieve adequate pink salmon escapement to this major pink salmon producing creek.

EMERGENCY ORDER NO. 4-FS-M-CB-38-93

EFFECTIVE DATE: 9:00 p.m. August 2, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 3 in all four districts located on the south (Pacific) side of the Alaska Peninsula Area.

<u>JUSTIFICATION:</u> Pink salmon escapements are generally very good in early producing streams. The August 1 pink salmon harvest was 512,000 fish which indicates at least a moderately strong run. More fishing time is needed to harvest the resource while the quality is still good.

EMERGENCY ORDER NO. 4-FS-M-CB-39-93

EFFECTIVE DATE: 8:00 a.m. August 6, 1993

EXPLANATION: This emergency order establishes a 8:00 a.m. August 6 until 9:00 p.m. August 7 commercial salmon fishing period in all four districts located on the South (Pacific) side of the Alaska Peninsula Area. The closed waters at Thin Point Cove are reduced to include only those waters within 1000 yards of the Thin Point Lagoon terminus and to within 500 yards of other salmon streams in Thin Point Cove. This emergency order supersedes emergency order 4-FS-M-36-93 in regards to Thin Point Cove.

<u>JUSTIFICATION:</u> Pink salmon escapements are generally good in early producing streams. Catches during the previous fishing period averaged 600,000 pink salmon per day which indicates a strong run. Fishing time is needed to harvest the resource. The sockeye escapement into Thin Point Cove appears strong and there will be no minus tides during the next several days which could cause fish to back out of the lagoon and into the fishery.

<sup>-</sup>Continued-

EMERGENCY ORDER NO. 4-FS-M-CB-41-93

EFFECTIVE DATE: 9:00 p.m. August 7, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 8 in all four districts located on the South (Pacific) side of the Alaska Peninsula Area.

<u>JUSTIFICATION:</u> The August 6 South Peninsula pink salmon harvest was 576,000 fish which indicates a strong run. Escapements are generally very good in early streams. More fishing time is needed to harvest the resource.

EMERGENCY ORDER NO. 4-FS-M-CB-42-93

EFFECTIVE DATE: August 8, 1993

<u>EXPLANATION:</u> This emergency order allows commercial salmon fishing up to the terminus at the ocean shoreline of all streams on Deer Island, all streams in the Mino Creek - Little Coal Bay Section except the stream at McGinty Point, Middle Creek, and Settlement Point Creek effective August 8 - 31.

<u>JUSTIFICATION:</u> Pink salmon escapement requirements have been met or exceeded in all streams on Deer Island, all in the Mino Creek - Little Coal Bay Section west of 161 degrees 01 minutes W. long., Settlement Point Creek, and Middle Creek.

EMERGENCY ORDER NO. 4-FS-M-CB-43-93

EFFECTIVE DATE: 9:00 p.m. August 8, 1993

EXPLANATION: This emergency order extends the present commercial salmon fishing period 120 hours until 9:00 p.m. August 13 in the Deer Island Section and that portion of the South Central District east of 161 degrees 34 minutes W. long.

<u>JUSTIFICATION:</u> Pink salmon escapement goals have been reached or exceeded in all Deer Island streams and in most South Central District streams east of 161 degrees 34 minutes W. long. The Canoe Bay River chum salmon escapement goal has been reached.

EMERGENCY ORDER NO. 4-FS-M-CB-45-93

EFFECTIVE DATE: 8:00 a.m. August 11, 1993

EXPLANATION: This emergency order allows a commercial salmon fishing period from 8:00 a.m. August 11 until 9:00 p.m. August 13 in those portions of the South Peninsula (excluding closed waters under 5 AAC 09.350) that are presently closed.

<u>JUSTIFICATION:</u> The August South Peninsula pink salmon run continues to be very strong and will likely surpass the six million fish harvest projection. Escapements are generally good for this date. More fishing time is needed to harvest the resource.

EMERGENCY ORDER NO. 4-FS-M-CB-46-93

EFFECTIVE DATE: August 11, 1993

EXPLANATION: This emergency order reduces the closed waters at Bear Bay to include only the inner bay and fishing is allowed up to the terminus at the ocean shoreline of McGinty's Creek and Barney's Creek effective August 11-31.

The South Peninsula pink salmon run is very strong and the spawning capacity in Bear Bay is small. A substantial number of salmon are already in inner Bear Bay. By allowing fishing throughout the outer Bear Bay, an over abundance of dark salmon in the inner bay may be prevented. estimated pink salmon escapements into Barney's Creek and McGinty's Creek are 13,000 and 23,000. This is at or above the escapement goal. More fishing area is needed to harvest the resource.

EMERGENCY ORDER NO. 4-FS-M-CB-47-93

EFFECTIVE DATE: August 13, 1993

EXPLANATION: This emergency order reduces the closed waters at McGinty Point Creek to include only those waters upstream from the terminus at the ocean shoreline. From August 8 until now, this was the only stream in the Mino Creek-Little Coal Bay Section in which fishing was not allowed to the stream terminus.

The escapement goal of pink salmon in the creek at McGinty Point is 20,000 to 40,000. The present escapement is estimated to be 51,000. More fishing area is needed to harvest the resource.

EMERGENCY ORDER NO. 4-FS-M-CB-48-93

EFFECTIVE DATE: August 16, 1993

EXPLANATION: This emergency order establishes a 8:00 a.m. August 16 until 9:00 p.m. August 17 commercial salmon fishing period in the following locations:

- 1. Shumagin Islands Section
- 2. That portion of the Southwest Stepovak Section west of 160 degrees 29 minutes 36 seconds W. long.
- 3. Balboa Bay Section
- 4. Beaver Bay Section
- South Central District
   Southwestern District
- 7. Unimak District

The closed waters of Thin Point Cove are changed back to as listed in the regulation book during August 16 - 31.

JUSTIFICATION: Pink salmon runs continue to be strong west of 160 degrees 29 minutes 36 seconds W long., and in the Shumagin Islands. More fishing time is needed to harvest the resource in those areas. Pink and chum salmon escapements generally look poor to fair in Stepovak Bay Streams east of 160 degrees 29 minutes 36 seconds W. long., consequently that location will remain closed.

<sup>-</sup>Continued-

There are large minus tides during the coming week which could endanger the Thin Point Cove sockeye escapement. Some of the sockeye in the lagoon will be used for subsistence. Consequently Thin Point Cove should remain closed to commercial salmon fishing until September when fishing area is needed to harvest coho salmon.

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EMERGENCY ORDER NO. 4-F-M-SP-37-93

EFFECTIVE DATE: 8:00 a.m. August 16, 1993

EXPLANATION: This emergency order expands closed waters areas as follows:

- 1. The closed waters of Squaw Harbor (Baralof Bay) are expanded to include all waters of Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.
- 2. The closed waters of Delarof Harbor are expanded to include all waters of Delarof Harbor west of 160°30′ W.long.
- 3. The closed waters of Acheredin Bay are expanded to include all waters in Acheredin Bay north of  $55^{\circ}10'$  N.lat.
- 4. The closed waters of Fox Hole (Little Harbor) are expanded to include all waters of Fox Hole west of 160°19′45" W.long.
- 5. The closed waters of Zachary Bay are expanded to include all waters of Zachary Bay south of 55°21' N.lat.

<u>JUSTIFICATION:</u> Southeastern District pink salmon runs continue to offer a harvestable surplus of salmon in excess to escapement requirements. Expanded closed waters areas are needed at this time to allow fishers the opportunity to catch salmon in excess to escapement requirements while providing protection to salmon in areas where water marked pink salmon mill. The expanded closed waters areas are not expected to result in large numbers of unharvested pink salmon.

EMERGENCY ORDER NO. 4-FS-M-CB-49-93

EFFECTIVE DATE: 12:00 a.m. August 17, 1993

EXPLANATION: This emergency order allows commercial salmon fishing up to the terminus at the ocean shoreline of Rocky River from noon August 17 through August 31, during open fishing periods.

<u>JUSTIFICATION:</u> The pink salmon escapement into Rocky River is estimated to be 29,800 fish. This is within the peak escapement goal range of 20,000 to 40,000 for this stream. More fishing area is needed to harvest the resource.

EMERGENCY ORDER NO. 4-F-M-SP-38-93

EFFECTIVE DATE: 12:00 a.m., noon, August 17, 1993

<u>EXPLANATION:</u> This emergency order allows commercial salmon fishing up to the terminus at the ocean shoreline of the following streams:

- 1. Bay Point which is located on the west shore of Unga Island.
- 2. All streams along the south shore of Cape Aliaksin

This emergency order also supersedes emergency order number 4-F-M-SP-37-93 in regards to the closed waters area in Delarof Harbor. Closed waters in Delarof Harbor are reduced to the normal 500 yard closure at the terminus of all salmon

JUSTIFICATION: Closed waters at Bay Point and the three streams along the south shore of Cape Aliaksin will be reduced to the lagoon or stream terminus at the ocean shoreline to harvest pink salmon in excess to these streams annual escapement qoals.

Observations during an aerial survey on August 15, 1993 indicated that at this date, escapements into the salmon streams in Delarof Harbor are adequate. The closed waters areas in Delarof Harbor can be reduced to the normal 500 yard closure to harvest pink salmon in excess to these streams current escapement qoals.

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EMERGENCY ORDER NO. 4-FS-M-CB-50-93 EFFECTIVE DATE: 9:00 p.m. August 17, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours until 9:00 p.m. August 19 in the following locations:

- 1. Shumagin Islands Section
- 2. That portion of the Southwest Stepovak Section west of 160 degrees 29 minutes 36 seconds W. long.
- 3. Balboa Bay Section
- 4. Beaver Bay Section
- 5. South Central District
- 6. Southwestern District7. Unimak District

JUSTIFICATION: Pink salmon runs continue to be substantial west of 160 degrees 29 minutes 32 seconds W. long. and in the Shumagin Islands, even though fishing effort has declined. Escapements are generally very good. More fishing time is needed to harvest the resource.

EMERGENCY ORDER NO. 4-FS-M-CB-51-93

EFFECTIVE DATE: 9:00 p.m. August 19, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 20 in the following locations:

- 1. Shumagin Islands Section
- 2. That portion of the Southwest Stepovak Section west of 160 degrees 29 minutes 36 seconds W. long.
- Balboa Bay Section
   Beaver Bay Section
- 5. South Central District
- 6. Southwestern District
- 7. Unimak District

<sup>-</sup>Continued-

<u>JUSTIFICATION:</u> Pink salmon runs continue to be substantial west of 160 degrees 29 minutes 32 seconds W. long. and in the Shumagin Islands, even though fishing effort has declined. Escapements are generally very good. More fishing time is needed to harvest the resource.

EMERGENCY ORDER NO. 4-FS-M-CB-53-93

EFFECTIVE DATE: 9:00 p.m. August 20, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 21 in the following locations:

- 1. Shumagin Islands Section
- That portion of the Southwest Stepovak Section west of 160 degrees 29 minutes 36 seconds W.long.
- 3. Balboa Bay Section
- 4. Beaver Bay Section
- 5. That portion of the South Central District east of 161 degrees 34 minutes W.long.
- 6. All of the Southwestern District except that portion of the Volcano Bay Section north of 55 degrees 10 minutes N.lat.
- 7. Unimak District

From August 21 - 31 the closed waters are reduced to the terminus at the ocean shoreline of all streams in Dolgoi Harbor, during the open fishing period.

<u>JUSTIFICATION</u>: The South Peninsula pink salmon run continues to be surprisingly strong for this date in much of the area and escapements are generally very good. The chum salmon runs in Volcano Bay and the west side of Pavlof Bay have been under heavy fishing pressure for the past four days and escapements are lower than they should be for this date, consequently these areas will close at 9:00 p.m. August 20. Pink salmon escapement requirements have been met in Dolgoi Harbor.

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EMERGENCY ORDER NO. 4-FS-M-CB-54-93

EFFECTIVE DATE: 9:00 p.m. August 21, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 22 in the following locations:

- 1. Shumagin Islands Section
- That portion of the Southwest Stepovak Section west of 160 degrees 29 minutes 36 seconds W.long.
- 3. Balboa Bay Section
- 4. Beaver Bay Section
- 5. That portion of the South Central District east of 161 degrees 34 minutes W.long.
- 6. All of the Southwestern District except that portion of the Volcano Bay Section north of 55 degrees 10 minutes N.lat.
- 7. Unimak District

<u>JUSTIFICATION:</u> The South Peninsula pink salmon run continues to be surprisingly strong for this date in much of the area and escapements are generally very good. More fishing time is needed to harvest the resource.

<sup>-</sup>Continued-

EMERGENCY ORDER NO. 4-FS-M-CB-55-93

EFFECTIVE DATE: 9:00 p.m. August 22, 1993

 $\underline{\text{EXPLANATION:}}$  This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 23 in the following locations:

- Cold Bay Section
   Deer Island Section
- 3. Dolgoi Harbor
- 4. That portion of the South Central District located east of 161 degrees 34 minutes W. long.

<u>JUSTIFICATION:</u> Pink salmon escapements are good in the locations where fishing time is extended. The chum salmon escapement in Russel Creek on the west side of Cold Bay is excellent. Effort is light but harvest of surprisingly good numbers of good quality pink salmon is occurring. More fishing time is needed to harvest the resource.

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EMERGENCY ORDER NO. 4-F-M-SP-39-93

EFFECTIVE DATE: 9:00 p.m. August 22, 1993

This emergency order extends commercial salmon fishing time 48 hours, until 9:00 p.m., Tuesday, August 24 in the following locations:

- Shumagin Islands Section
   That portion of the South That portion of the Southwest Stepovak Section west of 160°29'36" W.long.
- That portion of the
   Balboa Bay Section
- 4. Beaver Bay Section

JUSTIFICATION: South Peninsula pink salmon runs continue to be strong for this date in most of the Southeastern District and escapements are good for this date. More fishing time is needed to harvest pink salmon in excess to escapement requirements.

EMERGENCY ORDER NO. 4-FS-M-CB-56-93

EFFECTIVE DATE: 9:00 p.m. August 23, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours until 9:00 p.m. August 25 in the Deer Island Section.

Escapements of pink salmon are excellent in all Deer Island JUSTIFICATION: streams and catches continue to be surprisingly strong for this date. fishing time is needed to harvest the resource.

EMERGENCY ORDER NO. 4-FS-M-CB-57-93

EFFECTIVE DATE: 8:00 p.m. August 24, 1993

EXPLANATION: This emergency order reopens that portion of the South Central District east of 161 degrees 34 minutes W. long. to commercial salmon fishing from 8:00 p.m. August 24 until 9:00 p.m. August 26.

JUSTIFICATION: Pink salmon escapement goals have been reached in nearly all South Central District streams east of 161 degrees W. long. These are early runs and no fishing has taken place there for a week. However, fishermen are requesting to fish the area, in case pink salmon are still moving in. This fishing period will give them an opportunity to harvest any pink salmon that may still be entering the eastern portion of the South Central District. Pink salmon runs have continued much later than normal in most of the South Peninsula this year.

EMERGENCY ORDER NO. 4-F-M-SP-40-93 EFFECTIVE DATE: 9:00 p.m. August 24, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours, until 9:00 p.m., Thursday, August 26 in the following locations:

1. Shumagin Islands Section

- 2. That portion of the Southwest Stepovak Section west of 160°29'36" W.long.
- 3. Balboa Bay Section
- 4. Beaver Bay Section

<u>JUSTIFICATION:</u> South Peninsula pink salmon runs continue to be strong for this date in most of the Southeastern District and escapements are good for this date. More fishing time is needed to harvest pink salmon in excess to escapement requirements.

EMERGENCY ORDER NO. 4-FS-M-CB-59-93 EFFECTIVE DATE: 9:00 a.m. September 1, 1993

EXPLANATION: This emergency order establishes a 9:00 a.m. September 3 until 8:00 p.m. September 5 commercial salmon fishing period in the following locations:

1. Cold Bay Section

- 2. Thin Point Section
- 3. Morzhovoi Bay Section
- 4. Ikatan Bay Section

5. Unimak District

- 6. Urilia Bay Section
- 7. Swanson Lagoon Section
- 8. Izembek Moffet Bay Section

The closed waters of Thin Point Cove are reduced to include only those waters within 1,000 yards of the Thin Point Lagoon terminus and within 500 yards of the other salmon stream emptying in Thin Point Cove.

Those waters of Lenard Harbor east of 162 degrees 25 minutes 46 seconds W. long. will remain closed to commercial salmon fishing until further notice.

Swanson Lagoon, its outlet channel and all waters within 500 yards of the outlet channel terminus will remain closed to commercial salmon fishing until further notice.

<u>JUSTIFICATION:</u> Coho salmon are now entering streams in the western portion of the Alaska Peninsula Area, and fishing time is needed for fishermen to harvest the resource.

Dark sockeye salmon are milling in Swanson Lagoon and it's outlet channel. No fishing should be allowed in the lagoon and near the outlet channel until the sockeye have moved out of the way.

<sup>-</sup>Continued-

The chum salmon run in Lenard Harbor continues to be weak and should not be fished.

Coho salmon are entering Thin Point Lagoon and fishing area is needed for fishermen to harvest the resource.

EMERGENCY ORDER NO. 4-F-M-SP-41-93

EFFECTIVE DATE: 9:00 a.m. September 1, 1993

 $\underline{\text{EXPLANATION:}}$  This emergency order allows a 9:00 a.m. Wednesday, September 1 until 8:00 p.m. Friday, September 3 salmon fishing period in the Southeastern District.

Closed waters are expanded to include all waters as follows:

- A. Zachary Bay: all waters in Zachary Bay south of 55°21' N. lat.
- B. Squaw Harbor (Baralof Bay): all waters in Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.
- C. Delarof Harbor: all waters in Delarof Harbor west of 160°30'W. long.
- D. Acheredin Bay: all waters in Acheredin Bay north of 55°10'N. lat.
- E. Fox Hole (Little Harbor): all waters in Fox Hole west of 160°19'45" W. long.
- F. Dorenoi Bay: all waters in Dorenoi Bay west of a line extending from the north shore of Dorenoi Bay at 55°39'12"N. lat., 160°23'06" W. long. to a point on the south shore of Dorenoi Bay at 55°37'54" N. lat., 160°24'36" W. long.
- G. Chichagof Bay: all waters in Chichagof Bay north of a line extending from the eastern shore of Chichagof Bay at 55°39'36" N. lat., 160°13'30" W. long. to a point on the western shore of Chichagof Bay at 55°38'56" N. lat., 160°15'W. long.
- H. Clark Bay: all waters of Clark Bay North of a line extending from the eastern shore of Clark Bay at 55°47′ N.lat., 160°58′45" W. long. to a point on the western shore of Clark Bay at 55°45′30" N. lat., 160°02′55" W. long.
- I. Grub Gulch: all waters of Grub Gulch north of 55°48' N. lat.
- J. Island Bay: all waters of Island Bay east of 159°38'12" W. long.
- K. Fox Bay: (1) all waters of the northeast head of Fox Bay east of 159°37′18" W. long.
  (2) all waters of the southeast head of Fox Bay east of a line extending from the north shore of the southeast head of Fox Bay at 55°37′07" N. lat., 159°38′12" W. long. to a point on the south shore of the southeast head of Fox Bay at 55°36′48" N. lat., 159°38′30" W. long.
- L. Boulder Bay: all waters of Boulder Bay east of 159°43' W. long.

All other closed waters are as listed in 5 AAC 09.350 in the finfish regulation book.

<u>JUSTIFICATION:</u> Fishing time is needed to harvest coho salmon which are entering local bays at this time. Many pink and chum salmon are schooled at the heads of several bays in the Southeastern District. The expanded closed waters areas are needed to protect the water marked, schooled salmon at the heads of the bays. Setgill net effort should not affect pink salmon escapements and purse seine effort is expected to be light.

<sup>-</sup>Continued-

EMERGENCY ORDER NO. 4-F-M-SP-42-93

EFFECTIVE DATE: 9:00 a.m. September 6, 1993

EXPLANATION: This emergency order allows a 9:00 a.m. Monday, September 6 until 8:00 p.m. Wednesday, September 8 salmon fishing period in the Southeastern District.

Closed waters are expanded to include all waters as follows:

- A. Zachary Bay: all waters in Zachary Bay south of 55°21' N. lat.
- Squaw Harbor (Baralof Bay): all waters in Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.
- Delarof Harbor: all waters in Delarof Harbor west of 160°30'W. long.
- D. Acheredin Bay: all waters in Acheredin Bay north of 55°10'N. lat.
- Fox Hole (Little Harbor): all waters in Fox Hole west of 160°19'45" W. long.
- Dorenoi Bay: all waters in Dorenoi Bay west of a line extending from the north shore of Dorenoi Bay at 55°39'12"N. lat., 160°23'06" W. long. to a point on the south shore of Dorenoi Bay at 55°37′54" N. lat., 160°24′36" W. long.
- G. Chichagof Bay: all waters in Chichagof Bay north of a line extending from the eastern shore of Chichagof Bay at 55°39'36" N. lat., 160°13'30" W. long. to a point on the western shore of Chichagof Bay at 55°38'56" N. lat., 160°15'W. long.
- H. Clark Bay: all waters of Clark Bay North of a line extending from the eastern shore of Clark Bay at 55°47' N.lat., 160°58'45" W. long. to a point on the western shore of Clark Bay at 55°45'30" N. lat., 160°02'55" W. long.
- Grub Gulch: all waters of Grub Gulch north of 55°48' N. lat. Island Bay: all waters of Island Bay east of 159°38'12" W. long.
- K. Fox Bay: (1) all waters of the northeast head of Fox Bay east of 159°37′18" W. long. (2) all waters of the southeast head of Fox Bay east of a line extending from the north shore of the southeast head of Fox Bay at 55°37′07" N. lat., 159°38′12" W. long. to a point on the south shore of the southeast head of Fox Bay at 55°36'48" N. lat., 159°38'30" W. long.
- L. Boulder Bay: all waters of Boulder Bay east of 159°43' W. long.

All other closed waters are as listed in 5 AAC 09.350 in the finfish regulation book.

JUSTIFICATION: Fishing time is needed to harvest coho salmon which are entering local bays at this time. Many pink and chum salmon are schooled at the heads of several bays in the Southeastern District. The expanded closed waters areas are needed to protect the water marked, schooled salmon at the heads of the bays. Set gillnet effort should not affect pink salmon escapements and purse seine effort is expected to be light. 

EMERGENCY ORDER NO. 4-F-M-SP-43-93

EFFECTIVE DATE: 8:00 p.m. September 8, 1993

This emergency order extends commercial salmon fishing time 48 hours, until 8:00 p.m. Friday, September 10 in the Southeastern District:

Closed waters are expanded to include all waters as follows:

- A. Zachary Bay: all waters in Zachary Bay south of 55°21′ N. lat.
- B. Squaw Harbor (Baralof Bay): all waters in Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.
- C. Delarof Harbor: all waters in Delarof Harbor west of 160°30'W. long.
- D. Acheredin Bay: all waters in Acheredin Bay north of 55°10'N. lat.
- E. Fox Hole (Little Harbor): all waters in Fox Hole west of 160°19'45" W. long.
- F. Dorenoi Bay: all waters in Dorenoi Bay west of a line extending from the north shore of Dorenoi Bay at 55°39'12"N. lat., 160°23'06" W. long. to a point on the south shore of Dorenoi Bay at 55°37'54" N. lat., 160°24'36" W. long.
- G. Chichagof Bay: all waters in Chichagof Bay north of a line extending from the eastern shore of Chichagof Bay at 55°39'36" N. lat., 160°13'30" W. long. to a point on the western shore of Chichagof Bay at 55°38'56" N. lat., 160°15'W. long.
   H. Clark Bay: all waters of Clark Bay North of a line extending from the
- H. Clark Bay: all waters of Clark Bay North of a line extending from the eastern shore of Clark Bay at 55°47′ N.lat., 160°58′45" W. long. to a point on the western shore of Clark Bay at 55°45′30" N. lat., 160°02′55" W. long.
- I. Grub Gulch: all waters of Grub Gulch north of 55°48' N. lat.
- J. Island Bay: all waters of Island Bay east of 159°38'12" W. long.
- K. Fox Bay: (1) all waters of the northeast head of Fox Bay east of 159°37′18" W. long.
  - (2) all waters of the southeast head of Fox Bay east of a line extending from the north shore of the southeast head of Fox Bay at 55°37′07" N. lat., 159°38′12" W. long. to a point on the south shore of the southeast head of Fox Bay at 55°36′48" N. lat., 159°38′30" W. long.
- L. Boulder Bay: all waters of Boulder Bay east of 159°43' W. long.

All other closed waters are as listed in 5 AAC 09.350 in the finfish regulation book.

<u>JUSTIFICATION</u>: Fishing time is needed to harvest coho salmon which are entering local bays at this time. Many pink and chum salmon are schooled at the heads of several bays in the Southeastern District. The expanded closed waters areas are needed to protect the water marked, schooled salmon at the heads of the bays. Set gillnet effort should not affect pink salmon escapements and purse seine effort is expected to be light. During the halibut fishing period of September 8-9 set gillnet gear is also expected to be light.

EMERGENCY ORDER NO. 4-F-M-SP-44-93

EFFECTIVE DATE: 9:00 a.m. September 13, 1993

EXPLANATION: This emergency order allows a 9:00 a.m. Monday, September 13 until 8:00 p.m. Wednesday, September 15, 1993 commercial salmon fishing period in the Southeastern District:

Closed waters are expanded to include all waters as follows:

- A. Zachary Bay: all waters in Zachary Bay south of 55°21′ N. lat.
- B. Squaw Harbor (Baralof Bay): all waters in Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.

<sup>-</sup>Continued-

- Delarof Harbor: all waters in Delarof Harbor west of 160°30′ W. long.
- D. Acheredin Bay: all waters in Acheredin Bay north of 55°10'N. lat.
- Fox Hole (Little Harbor): all waters in Fox Hole west of 160°19'45" W.
- F. Dorenoi Bay: all waters in Dorenoi Bay west of a line extending from the north shore of Dorenoi Bay at  $55^{\circ}39'12"N$ . lat.,  $160^{\circ}23'06"$  W. long. to a point on the south shore of Dorenoi Bay at 55°37′54" N. lat., 160°24′36" W. long.
- G. Chichagof Bay: all waters in Chichagof Bay north of a line extending from the eastern shore of Chichagof Bay at 55°39'36" N. lat., 160°13'30" W. long. to a point on the western shore of Chichagof Bay at 55°38'56" N. lat., 160°15'W. long.
- H. Clark Bay: all waters of Clark Bay North of a line extending from the eastern shore of Clark Bay at 55°47′ N.lat., 160°58'45" W. long. to a point on the western shore of Clark Bay at 55°45'30" N. lat., 160°02'55"
- Grub Gulch: all waters of Grub Gulch north of 55°48' N. lat.
- Island Bay: all waters of Island Bay east of 159°38'12" W. long.
- (1) all waters of the northeast head of Fox Bay east of Fox Bay: 159°37′18" W. long. (2) all waters of the southeast head of Fox Bay east of a line
  - extending from the north shore of the southeast head of Fox Bay at 55°37′07" N. lat., 159°38′12" W. long. to a point on the south shore of the southeast head of Fox Bay at 55°36′48" N. lat., 159°38'30" W. long.
- Boulder Bay: all waters of Boulder Bay east of 159°43' W. long.

All other closed waters are as listed in 5 AAC 09.350 in the finfish regulation book.

<u>JUSTIFICATION:</u> Fishing time is needed to harvest coho salmon which are entering local bays at this time. Many pink and chum salmon are schooled at the heads of several bays in the Southeastern District. The expanded closed waters areas are needed to protect the water marked, schooled salmon at the heads of the bays. Set gillnet effort should not affect late run pink salmon escapements and I do not expect any purse seine effort. 

EMERGENCY ORDER NO. 4-F-M-SP-44-93

EFFECTIVE DATE: 9:00 a.m. September 13, 1993

EXPLANATION: This emergency order allows a 9:00 a.m. Monday, September 13 until 8:00 p.m. Wednesday, September 15, 1993 commercial salmon fishing period in the Southeastern District:

Closed waters are expanded to include all waters as follows:

- Α.
- Zachary Bay: all waters in Zachary Bay south of 55°21' N. lat. Squaw Harbor (Baralof Bay): all waters in Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.
- Delarof Harbor: all waters in Delarof Harbor west of 160°30'W. long.
- Acheredin Bay: all waters in Acheredin Bay north of 55°10'N. lat.
- Fox Hole (Little Harbor): all waters in Fox Hole west of 160°19'45" W. long.
- Dorenoi Bay: all waters in Dorenoi Bay west of a line extending from the north shore of Dorenoi Bay at 55°39'12" N. lat., 160°23'06" W. long. to a point on the south shore of Dorenoi Bay at 55°37′54" N. lat., 160°24′36" W. long.

- G. Chichagof Bay: all waters in Chichagof Bay north of a line extending from the eastern shore of Chichagof Bay at 55°39'36" N. lat., 160°13'30" W. long. to a point on the western shore of Chichagof Bay at 55°38'56" N.
- lat., 160°15'W. long. H. Clark Bay: all waters of Clark Bay North of a line extending from the eastern shore of Clark Bay at 55°47' N.lat., 160°58'45" W. long. to a point on the western shore of Clark Bay at 55°45'30" N. lat., 160°02'55"
- I. Grub Gulch: all waters of Grub Gulch north of 55°48' N. lat.
- J. Island Bay: all waters of Island Bay east of 159°38'12" W. long.
- (1) all waters of the northeast head of Fox Bay east of K. Fox Bay: 159°37′18" W. long. (2) all waters of the southeast head of Fox Bay east of a line extending from the north shore of the southeast head of Fox Bay at 55°37'07" N. lat., 159°38'12" W. long. to a point on the south shore of the southeast head of Fox Bay at 55°36′48" N. lat., 159°38'30" W. long.
- L. Boulder Bay: all waters of Boulder Bay east of 159°43' W. long.

All other closed waters are as listed in 5 AAC 09.350 in the finfish regulation

<u>JUSTIFICATION:</u> Fishing time is needed to harvest coho salmon which are entering local bays at this time. Many pink and chum salmon are schooled at the heads of several bays in the Southeastern District. The expanded closed waters areas are needed to protect the water marked, schooled salmon at the heads of the bays. Set gillnet effort should not affect late run pink salmon escapements and I do not expect any purse seine effort.

EMERGENCY ORDER NO. 4-FS-M-CB-64-93

EFFECTIVE DATE: September 13, 1993

EXPLANATION: This emergency order establishes a 9:00 a.m. September 13 until 8:00 p.m. September 15 commercial salmon fishing period in the following locations:

- 1. Cold Bay Section
- 2. Thin Point Section
- 3. Morzhovoi Bay Section
- 4. Ikatan Bay Section
- 5. Unimak District

- 6. Bechevin Bay Section
- 7. Urilia Bay Section 8. Izembek Moffet Bay Section

The closed waters of Lenard Harbor are changed back to as listed in the regulation book:

5AAC 09.310 is amended to read:

5AAC 09.310. FISHING SEASONS. Salmon may be taken as follows:

(b) (3) in the Swanson Lagoon Section from September 3 through September 5 and from September 3 through September 30 in the Izembek - Moffet Bay and Urilia Bay Sections.

<sup>-</sup>Continued-

JUSTIFICATION: The coho salmon run into Thin Point Cove appears strong and the escapement of over 3,000 fish is good for this date. The Urilia Bay catch of 1,100 coho (by seiners) during the September 3 - 5 fishing period indicated a normal run considering the location is presently difficult to fish with seines. Except for the Swanson Lagoon Section whose coho run appears weak (and will not be open during Sept. 13 - 15), fishermen have not tested coho run strength in the balance of the lower Alaska Peninsula. Fishing time is needed to harvest the resource and test run strength.

The Lenard Harbor chum salmon run is over and the expanded closed waters are no longer necessary.

EMERGENCY ORDER NO. 4-FS-M-CB-65-93

EFFECTIVE DATE: 8:00 p.m. September 15, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours until 8:00 p.m. September 17 in the following locations:

- 1. Cold Bay Section
- 2. Thin Point Section
- 3. Morzhovoi Bay Section
- 4. Ikatan Bay Section
- 5. Unimak District

- 6. Bechevin Bay Section
- 7. Urilia Bay Section
- 8. Izembek Moffet Bay Section

JUSTIFICATION: High winds have prevented most fishing during September 13 and 14 in the western portion of the Alaska Peninsula Area. A 48 hour extension will allow fishermen to make up for time lost.

EMERGENCY ORDER NO. 4-F-M-SP-45-93

EFFECTIVE DATE: 8:00 p.m. September 15, 1993

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours, until 8:00 p.m. Friday, September 17 in the Southeastern District:

Closed waters are expanded to include all waters as follows:

- Zachary Bay: all waters in Zachary Bay south of 55°21' N. lat. Squaw Harbor (Baralof Bay): all waters in Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.
- C. Delarof Harbor: all waters in Delarof Harbor west of 160°30'W. long.
- D. Acheredin Bay: all waters in Acheredin Bay north of 55°10'N. lat.
- E. Fox Hole (Little Harbor): all waters in Fox Hole west of 160°19'45" W. long.
- Dorenoi Bay: all waters in Dorenoi Bay west of a line extending from the north shore of Dorenoi Bay at 55°39'12"N. lat., 160°23'06" W. long. to a point on the south shore of Dorenoi Bay at 55°37′54" N. lat., 160°24′36" W. long.
- G. Chichagof Bay: all waters in Chichagof Bay north of a line extending from the eastern shore of Chichagof Bay at 55°39'36" N. lat., 160°13'30" W. long. to a point on the western shore of Chichagof Bay at 55°38′56" N. lat., 160°15′W. long.

<sup>-</sup>Continued-

- H. Clark Bay: all waters of Clark Bay North of a line extending from the eastern shore of Clark Bay at 55°47′ N.lat., 160°58′45" W. long. to a point on the western shore of Clark Bay at 55°45′30" N. lat., 160°02′55" W. long.
- I. Grub Gulch: all waters of Grub Gulch north of 55°48' N. lat.
- J. Island Bay: all waters of Island Bay east of 159°38'12" W. long.
- K. Fox Bay: (1) all waters of the northeast head of Fox Bay east of 159°37′18" W. long.
  (2) all waters of the southeast head of Fox Bay east of a line extending from the north shore of the southeast head of Fox Bay at 55°37′07" N. lat., 159°38′12" W. long. to a point on the south shore of the southeast head of Fox Bay at 55°36′48" N. lat., 159°38′30" W. long.
- L. Boulder Bay: all waters of Boulder Bay east of 159°43' W. long.

All other closed waters are as listed in 5 AAC 09.350 in the finfish regulation book.

<u>JUSTIFICATION:</u> Fishing time is needed to harvest coho salmon which are entering local bays at this time. Many pink and chum salmon are schooled at the heads of several bays in the Southeastern District. The expanded closed waters areas are needed to protect the water marked, schooled salmon at the heads of the bays. Set gillnet effort should not affect pink salmon escapements and there is no purse seine effort.

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EMERGENCY ORDER NO. 4-F-M-SP-46-93

EFFECTIVE DATE: 9:00 a.m. September 20, 1993

EXPLANATION: This emergency order allows a 9:00 a.m. Monday, September 20 until 8:00 p.m. Friday, September 24, 1993 commercial salmon fishing period in the Southeastern District:

Closed waters are expanded to include all waters as follows:

- A. Zachary Bay: all waters in Zachary Bay south of 55°21' N. lat.
- B. Squaw Harbor (Baralof Bay): all waters in Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.
- C. Delarof Harbor: all waters in Delarof Harbor west of 160°30'W. long.
- D. Acheredin Bay: all waters in Acheredin Bay north of 55°10'N. lat.
- E. Fox Hole (Little Harbor): all waters in Fox Hole west of 160°19'45" W. long.
- F. Dorenoi Bay: all waters in Dorenoi Bay west of a line extending from the north shore of Dorenoi Bay at 55°39'12"N. lat., 160°23'06" W. long. to a point on the south shore of Dorenoi Bay at 55°37'54" N. lat., 160°24'36" W. long.
- G. Chichagof Bay: all waters in Chichagof Bay north of a line extending from the eastern shore of Chichagof Bay at 55°39'36" N. lat., 160°13'30" W. long. to a point on the western shore of Chichagof Bay at 55°38'56" N. lat., 160°15'W. long.
- H. Clark Bay: all waters of Clark Bay North of a line extending from the eastern shore of Clark Bay at 55°47′ N.lat., 160°58′45" W. long. to a point on the western shore of Clark Bay at 55°45′30" N. lat., 160°02′55" W. long.
- I. Grub Gulch: all waters of Grub Gulch north of 55°48' N. lat.
- J. Island Bay: all waters of Island Bay east of 159°38'12" W. long.

<sup>-</sup>Continued-

- K. Fox Bay:
- (1) all waters of the northeast head of Fox Bay east of 159°37′18" W. long.
- (2) all waters of the southeast head of Fox Bay east of a line extending from the north shore of the southeast head of Fox Bay at  $5\overline{5}^{\circ}37'07$ " N. lat., 159°38'12" W. long. to a point on the south shore of the southeast head of Fox Bay at 55°36'48" N.lat., 159°38'30" W. long.
- L. Boulder Bay: all waters of Boulder Bay east of 159°43′ W. long.

All other closed waters are as listed in 5 AAC 09.350 in the finfish regulation book.

JUSTIFICATION: Fishing time is needed to harvest coho salmon which are entering local bays at this time. Many pink and chum salmon are schooled at the heads of several bays in the Southeastern District. The expanded closed waters areas are needed to protect the water marked, schooled salmon at the heads of the bays. Set gillnet effort should not affect late run pink salmon escapements and I do not expect any purse seine effort.

EMERGENCY ORDER NO. 4-F-M-SP-47-93

EFFECTIVE DATE: 9:00 a.m. September 27, 1993

EXPLANATION: This emergency order allows 9:00 a.m. Monday until 8:00 p.m. Friday commercial salmon fishing periods in the Southeastern District. This emergency order also extends the commercial salmon fishing season from Friday, October 1 until 8:00 p.m. Friday, October 29 in the Southeastern District.

Closed waters in the Southeastern District are expanded to include all waters as follows:

- A. Zachary Bay: all waters in Zachary Bay south of 55°21' N. lat.
- Squaw Harbor (Baralof Bay): all waters in Squaw Harbor west of the longitude of the east end of the Peter Pan Seafoods dock.
- C. Delarof Harbor: all waters in Delarof Harbor west of 160°30'W. long. D. Acheredin Bay: all waters in Acheredin Bay north of 55°10'W
- D. Acheredin Bay: all waters in Acheredin Bay north of 55°10'N. lat. E. Fox Hole (Little Harbor): all waters in For W. Fox Hole (Little Harbor): all waters in Fox Hole west of 160°19'45" W. long.
- Dorenoi Bay: all waters in Dorenoi Bay west of a line extending from the north shore of Dorenoi Bay at 55°39'12"N. lat., 160°23'06" W. long. to a point on the south shore of Dorenoi Bay at 55°37′54" N. lat., 160°24′36" W. long.
- Chichagof Bay: all waters in Chichagof Bay north of a line extending from the eastern shore of Chichagof Bay at 55°39'36" N. lat., 160°13'30" W. long. to a point on the western shore of Chichagof Bay at 55°38'56" N. lat., 160°15'W. long.

  H. Clark Bay: all waters of Clark Bay North of a line extending from the
- eastern shore of Clark Bay at 55°47′ N.lat., 160°58′45" W. long. to a point on the western shore of Clark Bay at 55°45'30" N. lat., 160°02'55" W. long.
- I. Grub Gulch: all waters of Grub Gulch north of 55°48' N. lat.
- J. Island Bay: all waters of Island Bay east of 159°38'12" W. long.

<sup>-</sup>Continued-

- K. Fox Bay:
- (1) all waters of the northeast head of Fox Bay east of  $159^{\circ}37'18"$  W. long.
- (2) all waters of the southeast head of Fox Bay east of a line extending from the north shore of the southeast head of Fox Bay at 55°37′07" N. lat., 159°38′12" W. long. to a point on the south shore of the southeast head of Fox Bay at 55°36′48" N. lat., 159°38′30" W. long.
- L. Boulder Bay: all waters of Boulder Bay east of 159°43′ W. long.

All other closed waters are as listed in 5 AAC 09.350 in the finfish regulation book.

<u>JUSTIFICATION:</u> Fishing time is needed to harvest coho salmon which are entering local bays at this time. The expanded closed waters areas are needed to protect the water marked, schooled salmon at the heads of the bays. Effort continues to be light throughout the district and is expected to decrease. September and October weather will likely reduce actual fishing days to about three to four days per week.

Aerial and foot surveys indicate that except for a few chum salmon streams, escapements in the Southeastern District of sockeye, pink, and chum salmon are good to excellent. With actual fishing days being about three days per week, decreasing effort, and with the additional closed water adjustments, coho salmon escapements should also be good for Southeastern District streams.

## APPENDIX B: METHOD FOR CALCULATING INDEXED TOTAL ESCAPEMENT

## Appendix B.1. Method for calculating indexed total escapement.

Unusual circumstances may cause occasional deviation, but basically the methods of calculating estimated indexed total escapements without the use of a weir or tower are as follows:

Chinook, Sockeye, Coho: These species tend to have a much longer stream life than pink and chum salmon. Therefore, the estimated total escapement is usually the peak escapement count. Carcasses are included. However, it is recognized that there are problems in large systems such as Ilnik and Caribou-David's Rivers. The basic problem on large systems is the length of time, expense, and fuel needed to do a thorough survey yet meet more pressing obligations.

The Caribou and David's River complex (including Coastal and other nearby lakes) is so massive a system for the size of its runs that complete surveys will probably never be done. The timing of such surveys would have to coincide with the peak of the South Peninsula pink and chum fisheries.

In the case of Ilnik, when a weir is not in place, numerous management surveys are done while the fishery is being managed for the Ilnik stocks. However, the peak surveys occur after the fishery has tapered off and most effort must be devoted to South Peninsula runs. However, Ilnik is a very important run and more effort is being made to accurately monitor the runs. The Ilnik sockeye run is of longer duration than the majority of unweired (or towered) North Peninsula sockeye streams. Ilnik sockeye also seem to have a shorter stream life than those in most other shallow water systems. Consequently, Ilnik requires at least two complete surveys or at least one complete survey with fish in the lower area during subsequent surveys being added to a peak count for the system. Many of the Ilnik figures listed in this publication are minimal.

Pink and Chum Salmon: A 21-day stream life is used to calculate total pink and chum
escapements. Fish in saltwater during the final survey are added:

## EXAMPLE

Survey Date	Pink	Chum	Fish at Mouth
Tul 10	F 000	0	5,000 P
July 10	5,000	0	
July 17	25,000	0	10,000 P
August 1	100,000	0	10,000 P
August 15	150,000	0	12,000 P
2	• • •		1,000 CH
September 1	150,000	5,000	2,000 CH
Estimated			
Total	255,000	7,000	

The estimate of 21 days stream life was used because significant numbers of carcasses seem to appear about three weeks after adult pinks and chums first appear in Alaska Peninsula streams. It is recognized that stream life can vary, however this method is easily duplicated and is comparable from year to year. Variation in stream life is likely a much smaller factor than variation between observers.

With the exception of several small streams, there are no problems of streams being obscured by brush or trees in the Alaska Peninsula and Aleutian Islands Areas. With several exceptions, visibility of spawning grounds is outstanding during periods of normal water flow and clear weather.

APPENDIX C: PERSONNEL LIST, 1993

Appendix C.1. Personnel list, 1993.

Employee	Title / PCN	Duties And Location	
Arnie Shaul	FB III 11-1033	Alaska Peninsula (excluding Southeastern District) and Aleutian Islands Areas Salmon Management Biologist, Cold Bay.	
Jim McCullough	FB III 11-1265	Southeastern District - Alaska Peninsula Area Salmon Management Biologist, Sand Point.	
Bob Berceli	FB II 11-1833	Alaska Peninsula Area Assistant Salmon Management Biologist, Cold Bay.	
Rod Campbell	FB II 11-1275	Alaska Peninsula Area Assistant Salmon Management Biologist, Sand Point.	
Hal Terry	Pilot I 11-1415	Chief Pilot and Aircraft Mechanic, Cold Bay.	
Randy Webber	Pilot I 11-1430	Pilot and Aircraft Mechanic, Chignik.	
David Henley	Pilot Non-Perm	Pilot, Chignik.	
Lucinda Neel	PT II 11-1059	Publication Technician, Kodiak	
Sharon Theis	Clerk	Clerk Typist, Kodiak.	
Steve Krueger	FB I 11-1911	King Cove, Salmon Research.	
Mark Weinberger	FB I 11-1352	King Cove, Salmon Research.	
Dan Miller	FT III 11-1416	Middle Lagoon Weir, Salmon Management.	
Kenyon Pope	FT III 11-1819	South Unimak Monitor and Canoe Bay, Salmon Management.	
Jon Streifel	FT I M-240	Canoe Bay, Salmon Management.	
Shawna Rudio	FT III 11-1604	Thin Point Cove, Salmon Management.	
Laura Ashford	FT II 11-1959	Thin Point Cove, Salmon Management.	
Dan Thomas	FT III 11-1776	King Cove, Salmon Research.	
Judy Hamik	FT III 11-1849	Sand Point, Salmon Management.	
Matt Ford	FB I 11-1411	Orzinski Weir, Salmon Management.	
Justine Freeman	FT III 11-1957	Orzinski Weir, Salmon Management.	
Steve Reed	FT II 11-1467	Sand Point, King Cove, Salmon Research.	

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